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U.S. Department
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**National Highway
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On-scene Investigation / Vehicle to Vehicle
Dynamic Science, Inc. / Case Number: DS9520
1985 GMC school bus
Arizona
, 1995

Technical Report Documentation Page

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15. Supplemental Notes

16. Abstract

This three-vehicle intersection collisions occurred in . 1995 within the intersection of two rural roadways, located in southwestern Arizona.

Vehicle 1, a 1985 GMC 72 passenger school bus, was traveling eastbound approaching a four leg intersection at an estimated speed of 8 km/h (5 mph) in a left turn lane intending to turn north. It was being driven by a 51 year old female. It is unknown if she was restrained by the available 2-point manual lap restraint. Vehicle 2, a 1987 Kenworth C-500 dump truck driven by a an unrestrained 23 year old male, fully loaded with gravel and rocks, was traveling southbound at an estimated speed of 50 km/h (31 mph). Vehicle 3, a 1984 Ford F-60 truck pulling a three-axle flatbed trailer was being driven eastbound by an unrestrained 44 year old male at an estimated speed of 48 km/h (30 mph).

Vehicle 2 failed to stop at a stop sign and entered the intersection. The driver of this vehicle attempted to avoid the collision by braking and steering to the right. The driver of Vehicle 1 attempted to avoid the impending collision by accelerating straight ahead. The front of Vehicle 2 struck the left rear of Vehicle 1. The initial impact caused Vehicle 1 to rotate counterclockwise, and Vehicle 2 to rotate clockwise resulting in contact between the left upper portion of the bus and the dump box of Vehicle 2. This impact ripped away a portion of the side and roof of the school bus, allowing large rocks and gravel to intrude into the interior of the bus. After impact, both vehicles traveled southwest to their final rest positions. The trailer of Vehicle 3 sustained damage to the left side from the right rear portion of the bus as it was pushed backward. Both Vehicles 1 and 2 were towed from the scene due to damage. Vehicle 3 was driven from the scene under its own power. The trailer of Vehicle 3 was towed from the scene due to damage.

As a result of the of the collision with Vehicle 2, one school bus occupant received fatal injuries, seven students were seriously injured, seven more had AIS-1 level wounds, the injury status for ten occupants is unknown, and the driver and other occupants were not hurt.

It is believed that the fatal and most serious injuries were sustained by those students who were seated in the left rear portion of the school bus. The fatally injured case occupant and the seat in which he was riding in were ejected from the school bus.

17. Key Words	18. Distribution Statement
School bus, injury	

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No of pages	22. Price

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

Dynamic Science, Inc.
Accident Investigation
Case Number: DS9520

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TECHNICAL SUMMARY:

This three-vehicle intersection collisions occurred in , 1995 within the intersection of two rural roadways, located in

Vehicle 1, a 1985 GMC 72 passenger school bus, was traveling eastbound approaching a four leg intersection at an estimated speed of 8 km/h (5 mph) in a left turn lane intending to turn north. It was being driven by a 51 year old female. It is unknown if she was restrained by the available 2-point manual lap restraint. Vehicle 2, a 1987 Kenworth C-500 dump truck driven by a an unrestrained 23 year old male, fully loaded with gravel and rocks, was traveling southbound at an estimated speed of 50 km/h (31 mph). Vehicle 3, a 1984 Ford F-60 truck pulling a flatbed trailer was being driven eastbound by an unrestrained 44 year old male at an estimated speed of 48 km/h (30 mph).

Vehicle 2 failed to stop at a stop sign and entered the intersection. The driver of this vehicle attempted to avoid the collision by braking and steering to the right. The driver of Vehicle 1 attempted to avoid the impending collision by accelerating straight ahead. The front of Vehicle 2 struck the left rear of Vehicle 1.

The initial impact caused Vehicle 1 to rotate counterclockwise, and Vehicle 2 to rotate clockwise resulting in contact between the left upper portion of the bus and the dump box of the Vehicle 2. This impact ripped away a portion of the side and roof of the school bus, allowing large rocks and gravel to intrude into the interior of the bus. After impact, both vehicles traveled southwest to their final rest positions. The trailer of Vehicle 3 sustained damage to the left side from the right rear portion of the bus as it was pushed backward. Both Vehicles 1 and 2 were towed from the scene due to damage. Vehicle 3 was driven from the scene under its own power. The trailer of Vehicle 3 was towed from the scene due to damage.

As a result of the of the collision with Vehicle 2, one school bus occupant received fatal injuries, seven students were seriously injured, seven more had AIS-1 level wounds, the injury status for ten occupants is unknown, and the driver and other occupants were not hurt.

Based on our inspection of the school bus, it is believed that the fatal and most serious injuries were sustained by those students who were seated in the left rear portion of the school bus. The fatally injured case occupant and the seat in which he was riding were ejected from the school bus. He received an avulsion of the scalp on the right side. There was also hemorrhage in the right temporal area and in the front parietal scalp. There was brain edema and mild subaracnoid hemorrhage on the right parietal occipital area and on the right cerebellar hemisphere. The victim also sustained fractures to the right clavicle, left anterior rib and pelvis. He had extensive hemorrhage to his chest area internally, including both lungs. He also sustained avulsion of the muscle along the vertebrae and numerous contusions, lacerations and abrasions. The sources of the injuries were unknown because of the numerous events that occurred in the collision from the major intrusion into the bus and ejection of the case occupant to flying rocks and glass.

ACCIDENT DATA:

Location:	
Area/Type:	Rural
Date/Time:	Summer/Morning
Accident Type:	School Bus/Truck/Truck

INJURY SEVERITY:

Vehicle 1	Driver, no injury
	Occupant 2 was apparently not injured
	Occupants 3, 5, 6, 13, 16, 17, 19, 24, 25, 28 had unknown injuries
	Occupants 4, 7, 8, 10, 11, 14, 15, and 21 sustained contusions, lacerations and abrasions (AIS-1) injuries
	Occupants 9, 12, 18, 20, 22, 23, and 26 had serious injuries
	Occupant 27 (the case occupant), AIS-5 (fatal)
Vehicle 2	Driver, no injury
Vehicle 3	Driver, no injury

AMBIENCE:

Viewing Conditions:	No viewing restrictions
Cloud Cover:	None
Precipitation:	None
Temperature:	41° c (105° F)
Road Surface:	Dry

ROADWAY:

	Vehicle 1	Vehicle 2	Vehicle 3
Type	Rural Arterial	Rural Arterial	Rural Arterial
Traffic Density	Moderate	Moderate	Moderate
Width	11.0 m (36.2 ft)	8.8 m (28.9 ft)	11.0 (36.2 ft)
Median	None	None	None
Edge	South edge 2.3 m (7.7 ft) Paved shoulder	Gravel shoulder	South edge 2.3 m (7.7 ft) paved shoulder
Surface	Asphalt	Asphalt	Asphalt
Coefficient of friction	.70	.70	.70
Horizontal alignment	Level	Level	Level
Vertical alignment	Level	Level	Level

TRAFFIC CONTROL:

	Vehicle 1	Vehicle 2	Vehicle 3
Signals	None	Stop sign	None
Speed limit	80 km/h (50 mph)	64 km/h (40 mph)	80 km/h (50 mph)

Markings: All legs of the intersection have standard lane markings

VEHICLES:

	Vehicle 1	Vehicle 2	Vehicle 3
Description	1985 GMC 6000	1987 Kenworth C-500	1984 Ford F-60 & flatbed trailer
Odometer	85,190 km (52,936 mi)	291,483 km (181,124 mi)	Unknown
Engine	V8/gas	Cummins NT	Unknown
Vehicle	72 passenger Bluebird School bus body mounted on a chassis	579.0 cm (19.0 ft) dump body on 6-4 chassis	Unknown
Tire Condition	2 front (new) 4 rear (good)	left front (poor) right front (good) 10 rear (good)	2 front (good) 4 rear (good)
Manual Restraints	2 -point manual lap restraint, driver only	2-point manual lap restraint, driver only	Unknown
Automatic Restraints	None	None	None
Reported Defects	None	Brakes out of adjustement	None
Cargo	None	Loaded with rocks	Loaded with Service Equipment
Windshield damage	None	None	None
Fleet Company	County school	Irrigation district	packing company
Tow Status	Towed due to collision damage	Towed due to collision damage	driven away (trailer towed)

VEHICLE DAMAGE:

	Vehicle 1	Vehicle 2	Vehicle 3
	Major damage was sustained in two impacts. There was major damage to the left side from impact # 1. Maximum crush was measured at the area of 7th row left side at 36.0 cm (14.2 in). Left side damage from 1 through 12 averaged 9.7 cm (3.8 in) of crush. The top was torn away from the 6th row back and impaled on Vehicle #2's rock guard on the dump bed allowing the cargo of rocks and gravel to fall into Vehicle 1's passenger compartment. Numerous seats were leaning with large rocks on them. The 12th row left side seat (case occupant) was ripped from its mooring and ejected. The right rear portion had approximately 124.0 cm (57.9 in) of crush at the right rear bumper corner from the 2nd impact.	Moderate damage to left front bumper with approximately 50.0 cm (19.7 in) of crush at left front bumper corner. The left front axle was displaced rearward 30.0 cm (11.8 in) The left front tire was deflated and a portion of fiber glass fender was torn away. The dump bed was displaced but this may have occurred when Vehicle 2 rolled onto its left side after initial impact.	No damage was done to the power unit. The trailer was heavily damaged on the left side. The tandem axle was displaced rearward. The mounting neck was deformed by impact.

	Vehicle 1	Vehicle 2	Vehicle 3
Impact speed (estimated)	8 km/h (5 mph)	50 km/h (31 mph)	48 km/h (30 mph)

Total Delta V:

Longitudinal Delta V: Delta V not computed

Lateral Delta V: Vehicles and impacts are out of scope

Energy Dissipation:

COLLISION SEQUENCE:

Pre- Crash:

This three-vehicle crash occurred during the morning of a fall weekday on a three-lane, undivided, rural, asphalt, roadway at a four-way intersection in The weather was clear , the roadway was dry and free of structural defects. Traffic was moderate and there were no viewing restrictions. The statutory speed limit is 80 km/h (50 mph).

The east/west roadway is approximately 11.0 meters (36.2 ft) in width. There is a 2.6 meter (8.5 ft) paved shoulder on the north edge and a 2.3 meter (7.7 ft) paved shoulder on the south edge. There is a turn lane 3.6 meter (11.7 ft) wide on the eastbound side for traffic intending to turn west. The north/south roadway is approximately 8.8 meters in width (28.9 ft). The southbound traffic lane is 4.8 meters (15.8 ft) wide. There is a stop sign for southbound traffic intending to turn west. Due to recent resurfacing, the solid white turn lane line was not in place at the time of this collision. Both collision involved roadways are straight and level with an estimated coefficient of friction of .70.

The Vehicle 1 (case vehicle), a 72 passenger, conventional school bus, constructed on a 1985 GMC 6000 chassis, was being driven east in the eastbound left turn lane, by the 51 year old female driver, at estimated speed of 8 km/h (5 mph). It is not known if the driver was wearing the 2-point manual lap restraint. Vehicle 1 was not equipped with passenger safety restraints; therefore occupants 2 through 28 were not restrained. Occupant 27, the case occupant, was seated in seat 1, row 12.

The driver of Vehicle 1 attempted to avoid the collision by accelerating straight ahead.

Vehicle 2, a 1987 Kenworth C-500 dump truck was traveling south in the southbound traffic lane, driven by a 23 year old male, at an estimated speed of 50 km/h (31 mph). The driver was not using the available 2-point manual restraint system.

The driver of Vehicle 2 failed to stop at the stop sign, and subsequently attempted to avoid the collision by braking and steering to the right.

Vehicle 3, a 1984 Ford F-60, pulling a flat-bed trailer, was traveling east in the eastbound traffic lane, driven by a 54 year old driver, at an estimated speed of 48 km/h (30 mph). There was no restraint system available.

There was no attempted evasive action taken by the driver of Vehicle 3.

Crash:

Vehicle 1 was initially struck by Vehicle 2 on the left side, 480.0 cm (189 in) rearward of the bus' front bumper. The front top of the dump bed (rock guard) penetrated the roof of the bus. The dump truck's left front bumper and left front side also contracted the left rear side of Vehicle 1 approximately 780.0 cm (307 in) rearward of the bus' front bumper. As the left side of the bus was crushed inward, part of the top rear half of the bus was torn away in an "S" pattern and was impaled on the rock guard. The lower rear and back portion of the bus was also torn away from the chassis at impact. During the collision numerous rocks spilled out of the dump bed and into the bus through the opening in the roof and broken window openings.

Vehicle 2 sustained damaged to the left front bumper and left side from initial impact.

Post crash:

After impact, Vehicle 1 rotated counterclockwise, traveling in a southwest direction and struck Vehicle 3. The right rear of Vehicle 1 struck the left front side of the flatbed trailer that was being towed by Vehicle 3. Vehicle 1 then continued in a southwest direction to a final rest position approximately thirty feet southwest of the initial impact with Vehicle 2. Vehicle 2 rotated clockwise after impact in a southwest direction and rolled over 1/4 turn on its left side to a final rest position off the road, having traveled approximately 24 m (80 ft) from the initial impact with Vehicle 1. Vehicle 3 was driven to a parked position after impact approximately 122 m (400 ft) east of the collision scene.

Occupant Kinematics:

Occupant 27 (the case occupant) was seated in an apparent normal upright position on a floor mounted, bench seat row 12, seat 1. This would be rearmost outboard position of the left side of the bus. The case occupant was 168.0 cm (66 in) in height and weighed 54 kg (120 lbs). His hand and foot positions could not be determined. Passenger safety restraints were not available and the case occupant was not restrained.

The occupant's seat position was in the extreme left rear seating position, well back of Vehicle 1's rear axle. While unconfirmed by occupant contact points, it is probable that the occupant was struck by rocks that tumbled through the opening in the roof. The force of the impact ripped the bench seat he was seated on from the floor. Both he and the seat were ejected from the rear of the bus due to the rear of the bus being torn away from the chassis.

The force of the impact, spilled cargo from Vehicle 2 and the ejection resulted in avulsion of the scalp from the skull on the right side. There was also hemorrhage in the right temporal area and in the front parietal scalp. There was brain edema and mild subaracnoid hemorrhage on the right parietal occipital area and the right cerebellar hemisphere. The victim also sustained fractures to the right clavicle, left anterior rib and pelvis. He had extensive hemorrhage to his chest area internally, including both lungs. He also sustained avulsion of the muscle along the vertebrae column and numerous contusions, lacerations and abrasions.

Scene Clearance:

The driver of Vehicle 1 was not injured. Occupant 2 was apparently not injured. Occupants 4, 7, 8, 10, 11, 15 and 21 sustained contusions, lacerations and abrasions (AIS-1) injuries. Occupants 3, 5, 6, 13, 16, 17, 19, 25 and 28 sustained unknown injuries. Occupant 20, 22, 23, 26, 18, 12 and 9 received serious (AIS-2-to3) type injuries. Occupant 27 (the case occupant) sustained major head and internal injuries; maximum AIS=AIS 5. The case occupant was pronounced deceased at the scene. He was transported to a local hospital morgue for autopsy. All of the other occupants were transported to a local trauma center where even the occupants that were not injured were treated for shock, trauma and emotional disturbance.

Safety Standards:

The police indicated that the inspection of Vehicle 2 (1987 Kenworth C-500 dump truck) at the scene by investigating officer revealed that at the time of the collision, the truck only had 25% braking capabilities and that 75% of the brakes were out of adjustment.

DRIVER AND OTHER OCCUPANTS:

VEHICLE 1

	DRIVER	OCCUPANT 2
Age/Sex	51 year old/Female	14 year old/Male
Seated Position	Left Front	Row 1, Seat 6
Seat type	Box Mounted Bucket	Floor Mounted Bench
Height	Unknown	Unknown
Weight	Unknown	Unknown
Occupant	School Bus Driver	Student
Pre-existing Medical Condition	None reported	None reported
Alcohol Involvement	None	None
Drug Involvement	None	None
Driving Experience	Unknown	N/A
Body Posture	Upright seated position	Unknown
Hand position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	Unknown	Unknown
Additional Occupants	27	26

	OCCUPANT 3	OCCUPANT 4
Age/Sex	Unknown/female	14 year old/Male
Seated Position	Row 2, Seat 1	Row 3, Seat 1
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	Unknown
Weight	Unknown	67 kg (147 lbs)
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	25	24

	OCCUPANT 5	OCCUPANT 6
Age/Sex	14 Year old/Female	15 year old/Female
Seated Position	Row 3 Seat 2	Row 3, Seat 5
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	Unknown
Weight	Unknown	Unknown
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	23	22

	OCCUPANT 7	OCCUPANT 8
Age/Sex	14 Year old/Female	14 Year old/Male
Seated Position	Row 4 Seat 1	Row 4 Seat 3
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	Unknown
Weight	Unknown	67 kg (147 lbs)
Occupation	Student	Student
Pre existing Medical Condition	None Known	Stitches on Leg
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	21	20

	OCCUPANT 9	OCCUPANT 10
Age/Sex	15 Year Old/Female	17 Year Old/Female
Seated Position	Row 4, Seat 4	Row 4 Seat 6
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	Unknown
Weight	Unknown	67 kg (147 lbs)
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	19	18

	OCCUPANT 11	OCCUPANT 12
Age/Sex	14 Year Old/Female	14 Year Old/Female
Seated Position	Row 5, Seat 1	Row 5, Seat 3
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	165 cm (65.0 in)
Weight	Unknown	57 kg (126 lbs)
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	17	16

	OCCUPANT 13	OCCUPANT 14
Age/Sex	14 Year Old/Female	14 Year Old/Female
Seated Position	Row 5, Seat 4	Row 6 Seat 1
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	Unknown
Weight	Unknown	67 kg (147 lbs)
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	15	14

	OCCUPANT 15	OCCUPANT 16
Age/Sex	14 Year Old/Female	Unknown/Female
Seated Position	Row 6, Seat 5	Row 6 Seat 6
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	Unknown
Weight	Unknown	67 kg (147 lbs)
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	13	12

	OCCUPANT 17	OCCUPANT 18
Age/Sex	Unknown	16 Year Old/Male
Seated Position	Row 4, Seat 4	Row 4 Seat 6
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	175 cm (69. 0 in)
Weight	Unknown	110 kg (243 lbs)
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	11	10

	OCCUPANT 19	OCCUPANT 20
Age/Sex	Unknown	16 Year Old/Female
Seated Position	Row 8, Seat 4	Row 9 Seat 1
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	157 cm (62 in)
Weight	Unknown	54 kg (120 lbs)
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	9	8

	OCCUPANT 21	OCCUPANT 22
Age/Sex	14 Year Old/Male	17 Year Old/Female
Seated Position	Row 9, Seat 4	Row 10 Seat 1
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	Unknown
Weight	Unknown	Unknown
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	7	6

	OCCUPANT 23	OCCUPANT 24
Age/Sex	17 Year Old/Female	Unknown/Female
Seated Position	Row 10, Seat 2	Row10 Seat 4
Seat type	Floor mounted Bench	Floor mounted bench
Height	157 cm (62 in)	Unknown
Weight	77 kg (170 lbs)	Unknown
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	5	4

	OCCUPANT 25	OCCUPANT 26
Age/Sex	Unknown/Female	16 Year Old/Male
Seated Position	Row 10, Seat 5	Row 11 Seat 1
Seat type	Floor mounted Bench	Floor mounted bench
Height	Unknown	Unknown
Weight	Unknown	Unknown
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	3	2

	OCCUPANT 27	OCCUPANT 28
Age/Sex	15 Year Old/Male	15 Year Old/Male
Seated Position	Row 12, Seat1	Row 12 Seat 4
Seat type	Floor mounted Bench	Floor mounted bench
Height	168 cm (66 in)	Unknown
Weight	54 kg (120 lbs)	Unknown
Occupation	Student	Student
Pre existing Medical Condition	None Known	None Known
Alcohol Involvement	None	None
Drug Involvement	None	None
Body Posture	Upright Seated Position	Upright Seated position
Hand Position	Unknown	Unknown
Foot Position	Unknown	Unknown
Restraint Usage	None Available	None Available
Additional Occupants	1	0

INJURIES:

Vehicle 1

	INJURY	AIS/OIC CODE	ICD-9	SOURCE
DRIVER	Not injured			
OCCUPANT 2	Not Injured			
OCCUPANT 3	Unknown			
OCCUPANT 4	Contusion, head	190402.1,9	620	Flying Rocks
OCCUPANT 5	Unknown			
OCCUPANT 6	Unknown			
OCCUPANT 7	Laceration, left arm	790600.1,2	884.0	Unknown
	Laceration, left side of head	190600.1,2	873.0	Flying Rocks
	Contusion, left side of head	190402.1,2	920	Flying Rocks
OCCUPANT 8	Stitches on leg (previous injury) reopened	890600.1,2	894.0	Seat Bottom
	Contusion, head	190402.1,9	920	Flying Rocks
OCCUPANT 9	Unknown injury, head	115099.7,0	854.0	Window Frame
OCCUPANT 10	Contusion, head	190402.1,9	920	Flying Rocks
OCCUPANT 11	Laceration, Knee	890600.1,9	891.0	Unknown
	Laceration, face	290600.1,9	873.40	Flying Rocks
	Loss of Consciousness	161000.2,0	850.9	Unknown
OCCUPANT 12	Laceration, above upper occipital scalp (6 cm)	190602.1,6	873.0	Flying Rocks
	Closed head injury Amnesia	16100.2,0	850.9	
	C-spine strain	640278.1,6	847.0	
OCCUPANT 13	Unknown			

OCCUPANT 14	Abrasions, left arm	790202.1,2	919.0	Unknown
	Lacerations, top of head	190600.1,6	873.0	Flying Rocks
	Abrasion, right left posterior	890202.1,1	916.0	Unknown
	Contusion, left leg	890402.1,2	924.9	Unknown
	Contusion, right leg	890402.1,1	924.9	Unknown
OCCUPANT 15	Abrasions, unknown location	990200.1,9	919.0	Flying Rocks
	Contusion, right leg	190402.1,9	924.9	Flying Rocks
OCCUPANT 16	Unknown			
OCCUPANT 17	Unknown			
OCCUPANT 18	Laceration, left forehead, over left eye (3.25 cm)	2290602.1,7	873.42	Flying glass
	Cerebral contusion	140602.3,9	851.0	Flying rocks
	Laceration, scalp	160600.1,9	873.0	Flying glass
OCCUPANT 19	Unknown			
OCCUPANT 20	Laceration, left knee (2 cm)	890602.1,2	891.0	Unknown
	Laceration, nose	290600.1,4	873.20	Flying rocks
	Laceration, left hand	790600.1,2	882.0	Flying glass
	Laceration, left forearm	790600.1,2	881.00	Flying glass
	Laceration, right face	290.600.1,1	873.40	Flying glass
	Fracture, vertebrae C-7	650216.2,6	805.07	Unknown
	Fracture, (multiple) nose	251000.1,4	802.0	Flying rocks
	Laceration, top of head	190600.1,6	873.0	Flying rocks
	Cervical strain	640278.1,2	847.0	Non-contact
	Laceration, right wrist	790602.1,1	881.02	Flying glass
	Abrasion, left hand	790202.1,2	914.0	Flying rocks

OCCUPANT 21	Laceration, knee	890600.1,9	891.0	Flying rocks
	Laceration, head	160600.1,9	873.0	Flying glass
OCCUPANT 22	Laceration, left hand	790600.1,2	882.0	Flying glass
	Laceration, right hand	790600.1,1	882.0	Flying glass
	Laceration, face	290600.1,9	873.40	Flying glass
	Laceration, head	190600.1,9	873.0	Flying glass
	Fracture, right clavicle	752200.2,1	810.0	Flying rocks
	Sprained, left hand	750402.1,2	842.1	Unknown
	Abrasions, (multiple) whole body	990200.1,0	919.0	Unknown
	Laceration, interior of mouth	243204.1,8	873.60	Unknown
	Cervical strain	640278.1,6	847.0	Non-contact
OCCUPANT 23	Fracture bilateral and dislocations of TMJ joints of mandible, right jaw went through right ear	250600.1,3 251604.2,3	802.25 830.1	Unknown
	Periorbital and temporal soft tissue swelling	result, no injury	N/A	Unknown
	Laceration, frontal scalp (10 cm)	190604.2,4	873.0	Flying rocks
	Fracture 5th metacarpal of left hand	752002.2,2	815.09	Unknown
	Major laceration, top of head, 100 stitches and staples	190604.2,6	873.1	Flying rocks
	2nd molar, right side tooth broken	251.404.1,8	873.63	Unknown
	1st molar right side tooth broken	251404.1,8	873.63	Unknown
	Incisor, right side bottom, chipped	251404.1,8	873.63	Unknown

	Broken, vessel, left eye	220200.1,2	900.89	Unknown
	Laceration, face, below lip	290600.1,8	873.40	Unknown
	Contusion, left elbow	790404.1,2	923.11	Unknown
	Right temporal and orbital region, dense foreign body	N/A	N/A	Unknown
OCCUPANT 24	Unknown			
OCCUPANT 25	Unknown			
OCCUPANT 26	Laceration, left head	190600.1,2	873.0	Flying rocks
	Unknown injury, right leg	N/A	N/A	Unknown
	Unknown injury, left leg	N/A	N/A	Unknown
OCCUPANT 27 (case occupant)	Contusion, left eye	297402.1,2	621.0	Unknown
	Contusion, right eye	297402.1,1	921.0	Unknown
	Fracture, right clavicle	752200.2,1	810.0	Unknown
	Contusion, right shoulder	790402.1,1	923.00	Unknown
	Contusion, right arm	790402.1,1	923.9	Unknown
	Contusion, right chest	490402.1,1	922.1	Unknown
	Avulsion, scalp	190800.1,9	873.1	Unknown
	Fracture, left 5th rib anterior, with hemothorax in both lungs	450214.3,2	807.05 860.3	Flying rocks
	Avulsion, muscle along vertebrae column	740400.2,9	879.6	Unknown
	Fracture, right pelvis	852600.2,1	808.0	Unknown
	Brain minimal uncal herniation	140202.5,8	854.0	Unknown

	Right parietal occipital hemorrhage	140629.4,1	853.0	Unknown
	Brain contusion, with subarachnoid hemorrhage	140204.5,8	851.4 852.3	Unknown
	lacerations, left elbow	790600.1,2	881.01	Unknown
	Contusions, numerous to body	990400.1,0	924.9	Flying rocks
	Chest left anterior abrasions	490202.1,2	911.0	Unknown
OCCUPANT 28	Unknown			

COLLISION MEASUREMENTS

Reference Point: Centerline of East/West Highway

Reference Line: RL #1 is South Edge of North/South Highway
RL #2 is North Edge of North/South Highway

DATA POINT RL #1	DISTANCE AND DIRECTION FROM REFERENCE POINT	DISTANCE AND DIRECTION FROM REFERENCE LINE
BRF Skid V1	0	7.8 m N
BLF Skid-V1	31 cm W	7.8 m N
ELF skid-V1	1.9 m W	9.3 m N
ERF skid-V1	1.9 m W	9.3 m N
FRP-RF-V1	9.6 m W	28 cm S
FRP-LF-V1	11.8 m W	30 cm S
FRP-RR-V1	12.2 m W	3.6 m N
Aprox Area of FRP-V2	16.8 m W	10 m S
API #1	7.2 m W	7.3 m N
API #2	12.2 m W	3.4 m N
RL #2		
BLR Scuff V-1	38 cm E	19.5 m N
LR Scuff Midpoint V1	51 cm W	9.3 m N
LR scuff C/O RL #2	4.6 m W	0.0
BRR Scuff	2.1 m W	9.4 m N
ERR Scuff	6.4 m W	2.1 m N

SCHOOL BUS SEATING CHART
(Injury Severity by Seating Position)

DRIVER No Injury

FRONT DOOR

SEAT ROW	1	2	3	4	5	6
						No Inj
	Unk					
	AIS-1				Unk	
	AIS-1	UNK		Unk		AIS-1
	AIS-1		AIS-1	Unk		
	AIS-2		AIS-2		AIS-1	Unk
	AIS-1					
	Unk	Unk	SEAT	Unk		
	AIS-3	Unk	SEAT	AIS-1		
	AIS-2			Unk	Unk	
	AIS-2	AIS-2				
	AIS-5			Unk		

REAR EXIT

PHOTO INDEX

PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
1	V1	South	View from final rest area across impact area
2	V1	Southwest	View from northeast corner
3	V1	–	View across impact area
4-8	V1	West	View back on Vehicles 1's and 3's approach
9-10	V1	East	Approach of Vehicle 1
11	V1	West	View across impact area
12	V1	N/A	Final rest position area
13	V1	Southwest	View from final rest position area
14-17	V2	South	Approach of Vehicle 2
18	V2	North	View back on Vehicle 2's approach
19	V2	Southwest	View to final rest area to final rest position
20	V1/V2	Southwest	View to final rest area of Vehicles 1 and 2
21-22	–	Northwest	View Northwest
23-25	V2	South	Approach of Vehicle 2
26	V1/V2	–	Impact to final rest position
27	V1	East	Approach of Vehicle 1
28-30	V2	North	View back of Vehicle 2's approach
31	V1	East	Approach view in turn lane
32-46	V1	–	Exterior views of Vehicle 1
47-89	V1	–	Interior views of Vehicle1
90-103	V2	–	Exterior views of vehicle 2
103-108	V2	–	Interior views of vehicle 2
109-114	V3	–	Exterior views of vehicle 3
115-117	V3	–	Interior views of vehicle 3
120-123	V3	–	Views of trailer of Vehicle 3

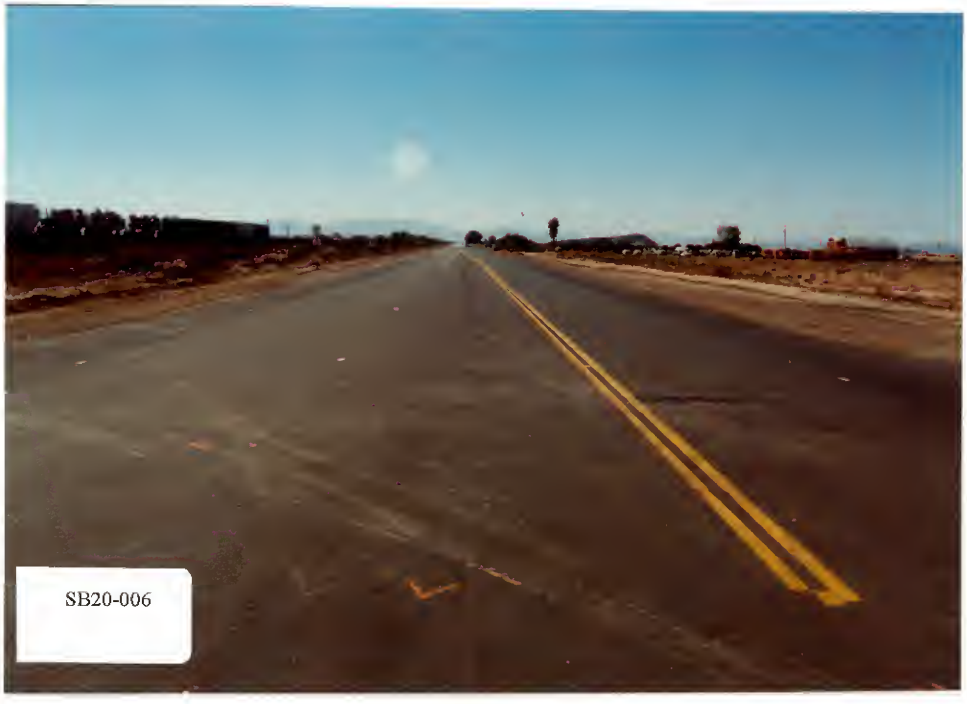

SB20-001


SB20-002


SB20-003


SB20-004


SB20-005


SB20-006


SB20-007


SB20-008


SB20-009

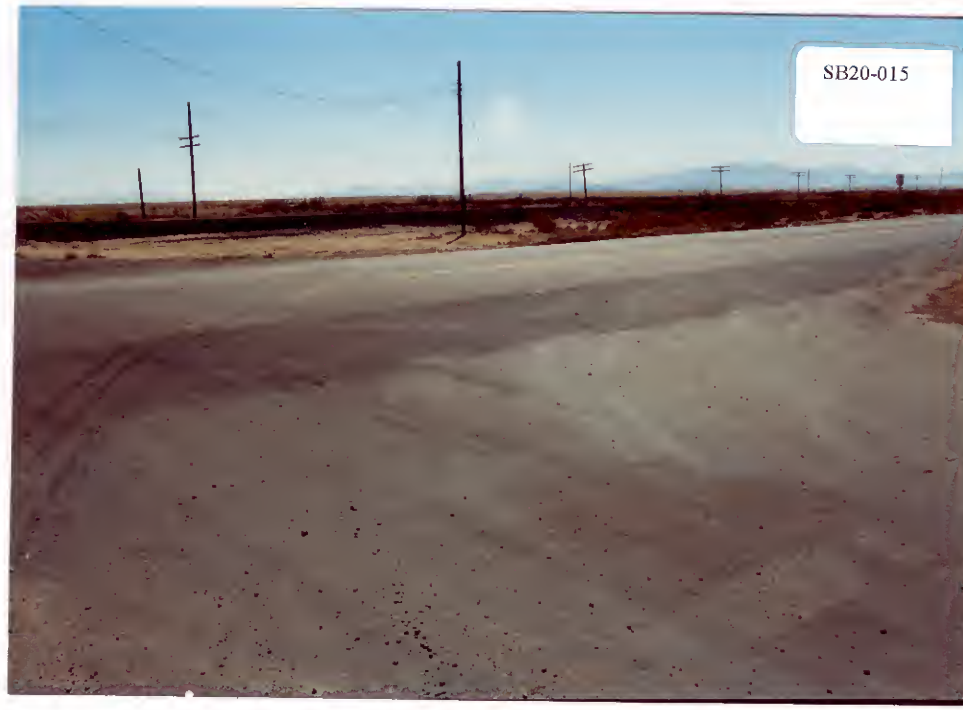

SB20-010


SB20-011


SB20-012


SB20-013

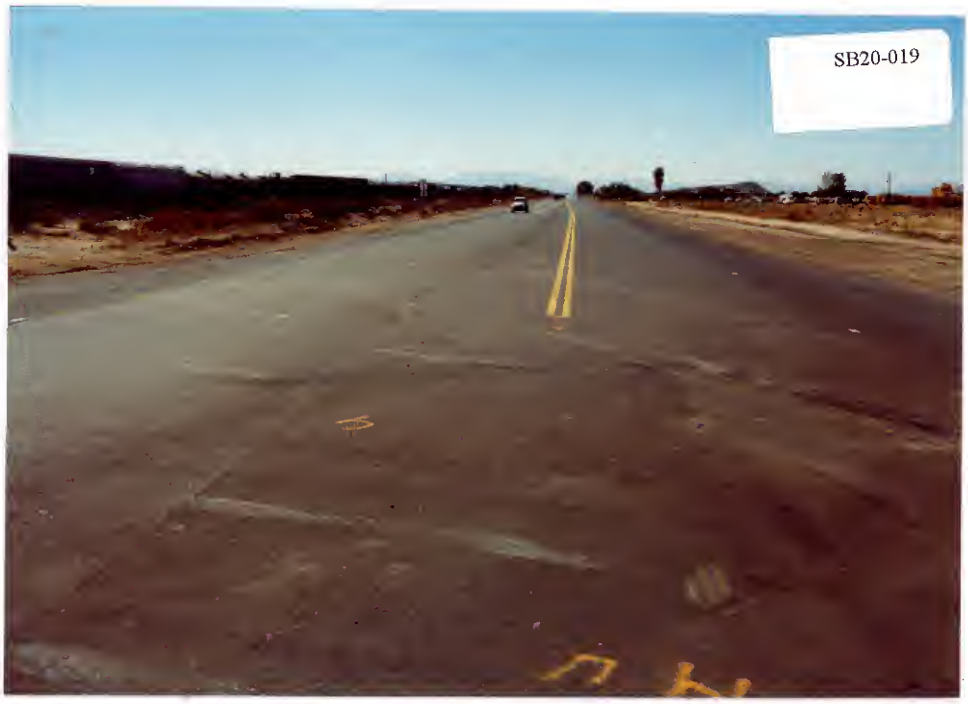

SB20-014


SB20-015

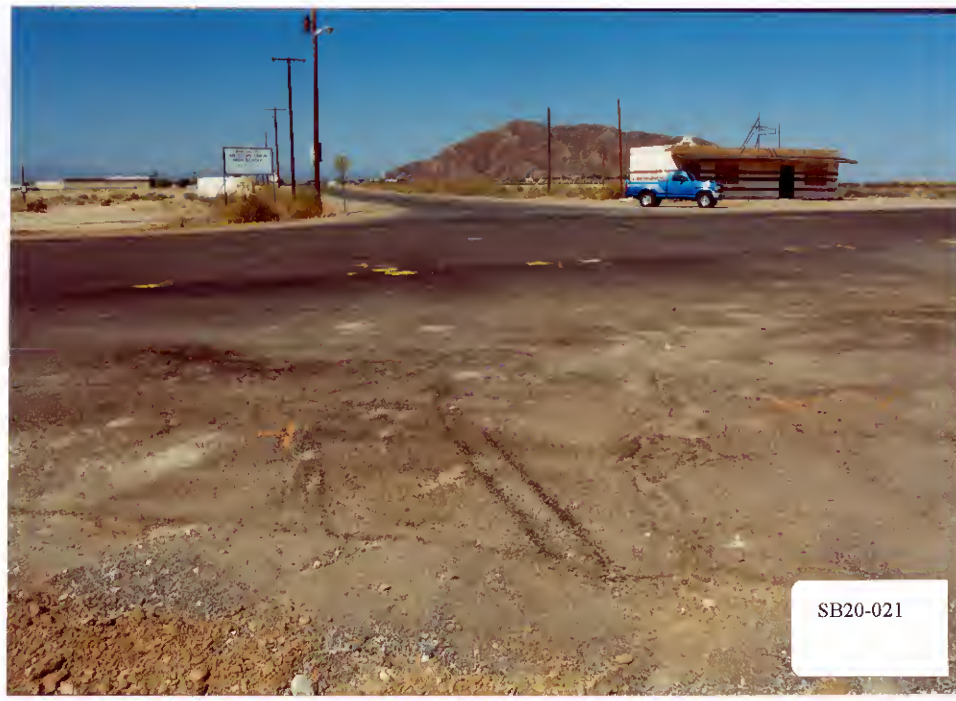

SB20-016


SB20-017


SB20-018

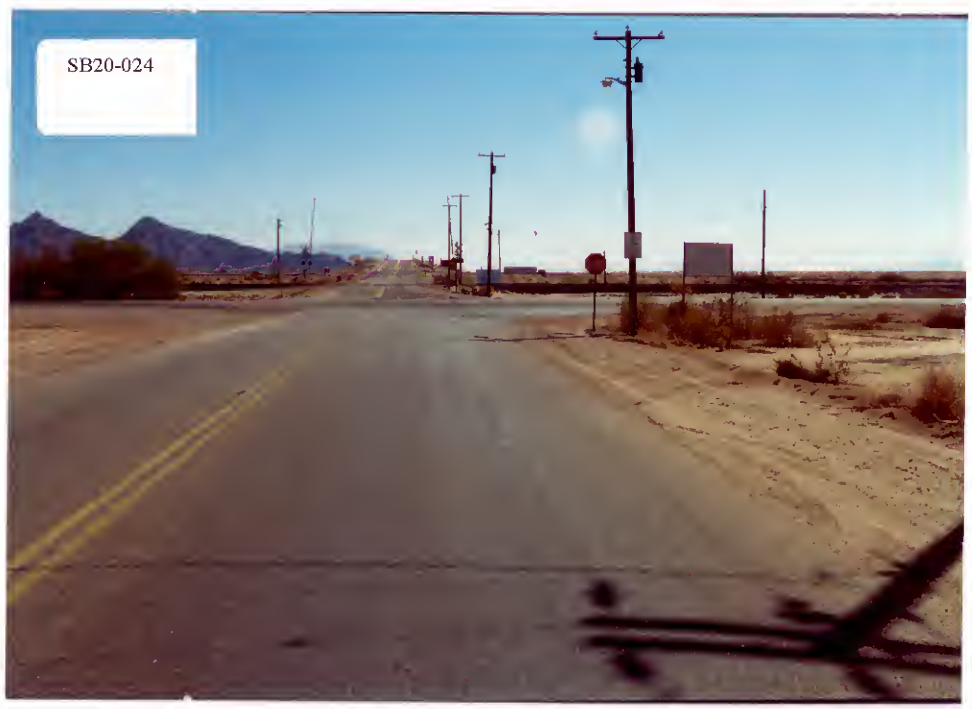

SB20-019


SB20-020


SB20-021


SB20-022


SB20-023


SB20-024


SB20-025

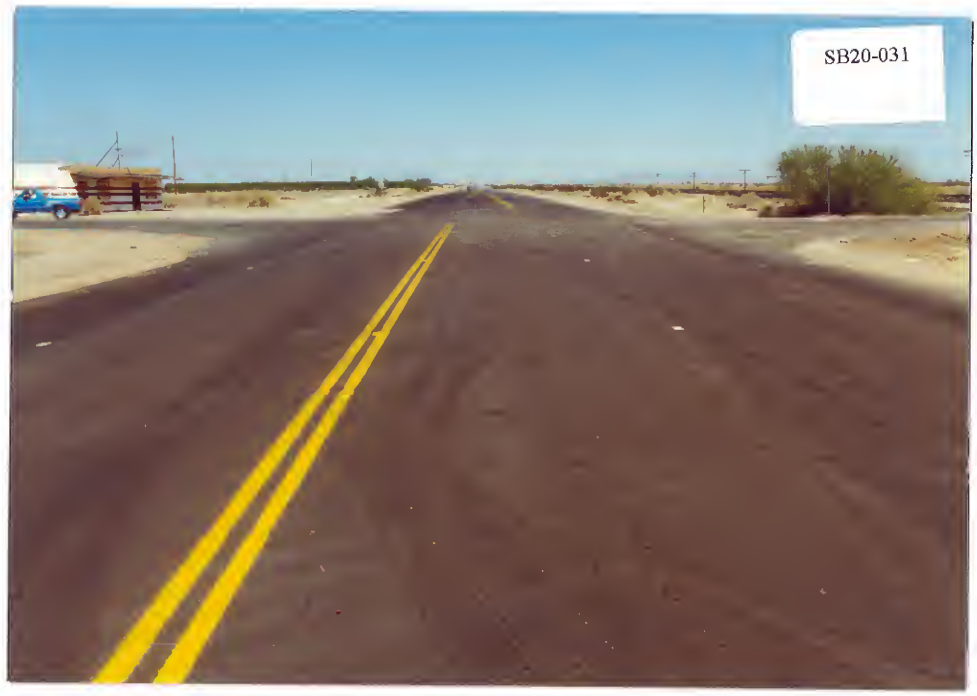

3
SB20-026


SB20-027


SB20-028


SB20-029


SB20-030


SB20-031


SCHOOL BUS
SB20-032


SB20-033


SB20-034
SCHOOL BUS


SB20-035


STOP
SB20-036


SB20-037


SB20-038
SCHOOL BUS

SB20-039

SB20-040


SCHOOL BUS
GMC
SB20-041


SB20-042

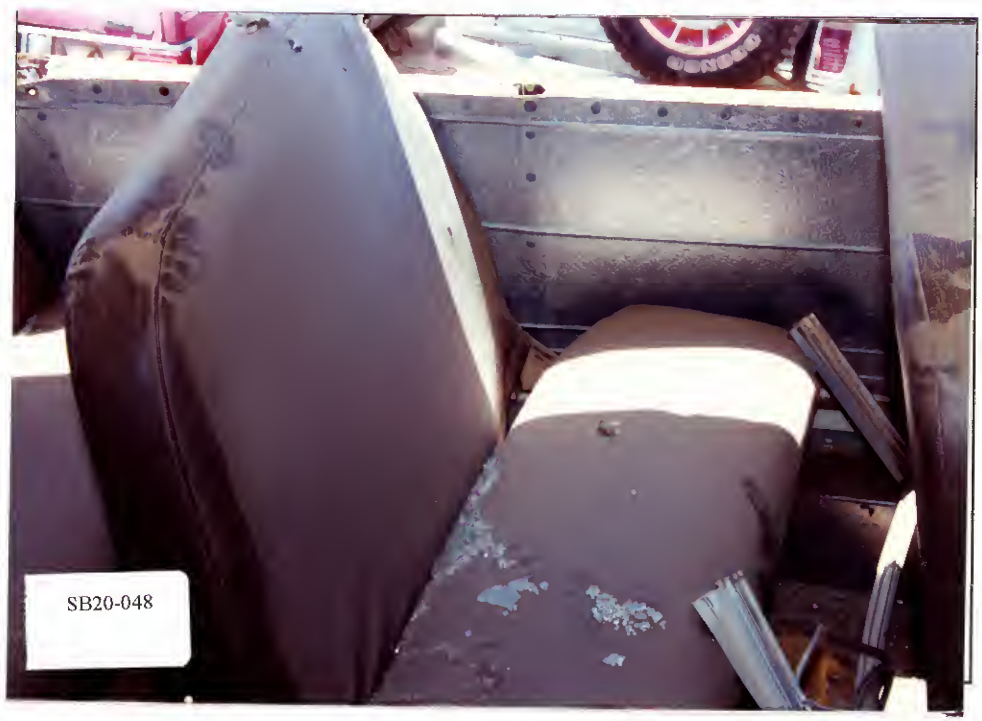
SB20-043

SB20-044


SB20-045


SB20-046


SB20-047


SB20-048


SB20-049


SB20-050


SB20-051


SB20-052


SB20-053


SB20-054


SB20-055

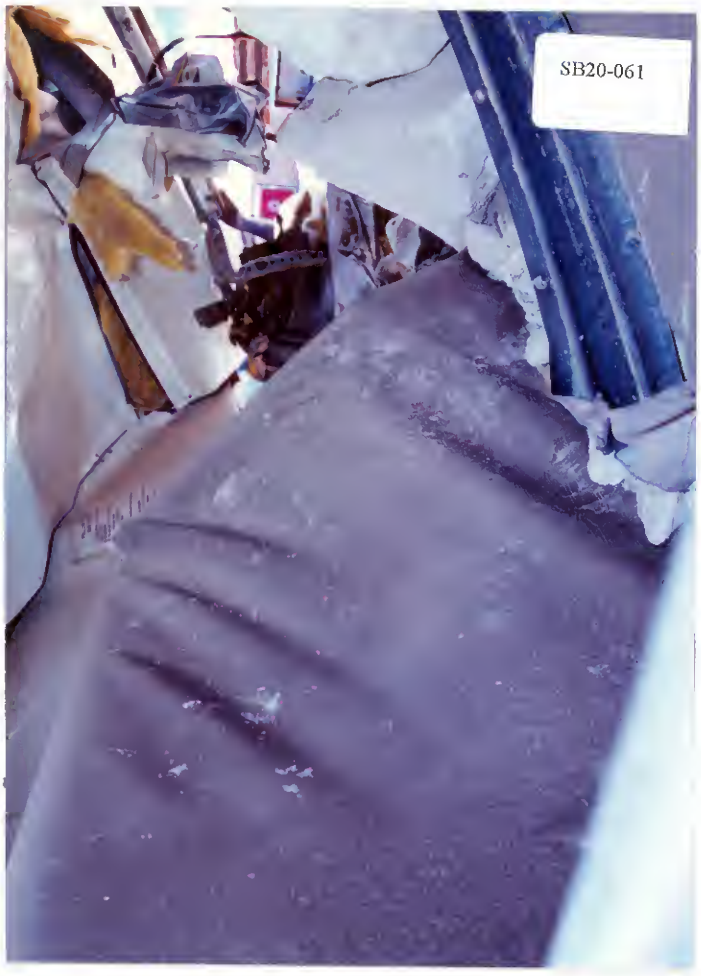

SB20-056


SB20-057


SB20-058


SB20-059


SB20-060




SB20-063

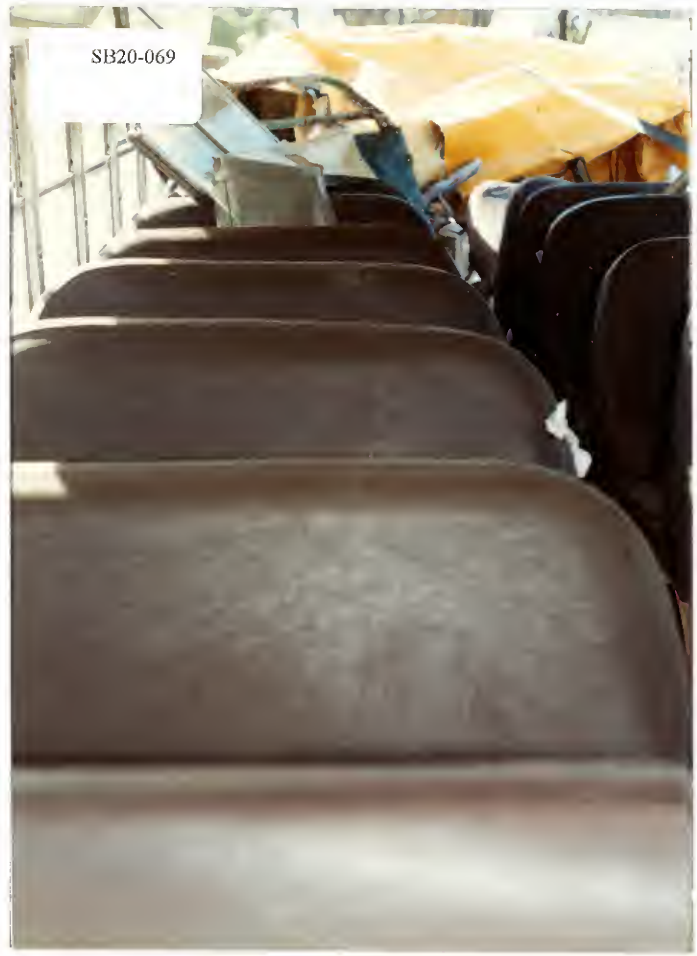

SB20-064


SB20-065


SB20-066
GMC

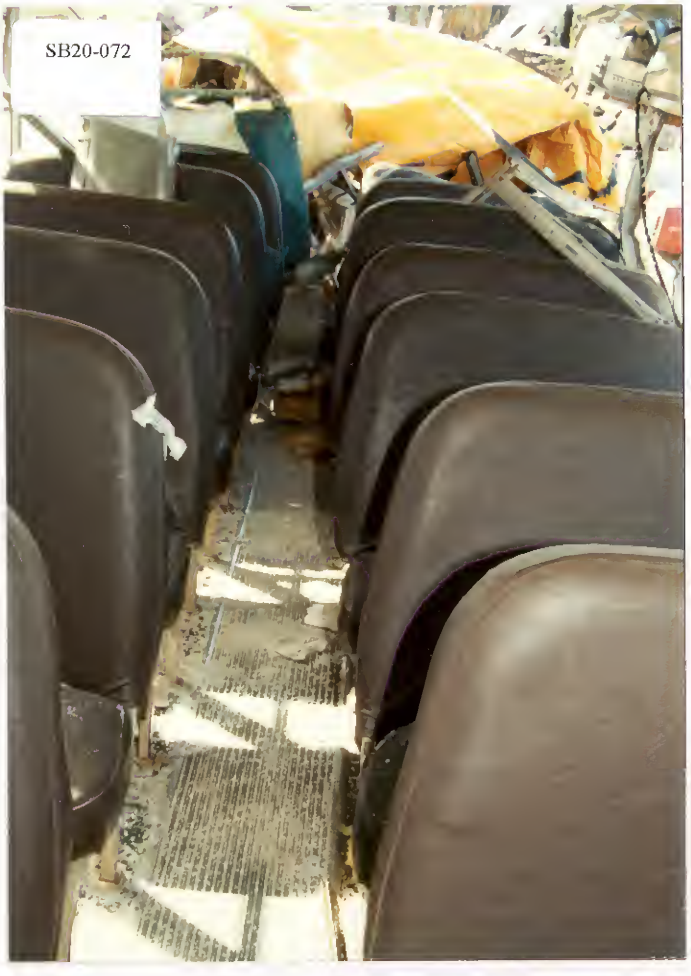

SB20-067


SB20-068


SB20-069


SB20-070


SB20-071


SB20-072


SB20-073
MANUFACTURED BY
BLUE BIRD BODY COMPANY


SB20-074
BLUE BIRD
BODY CO.


EMERGENCY DOOR
SEE INSTRUCTIONS
BELOW
FOLLOW THESE
BUS RULES
SB20-075


SB20-076

SB20-077

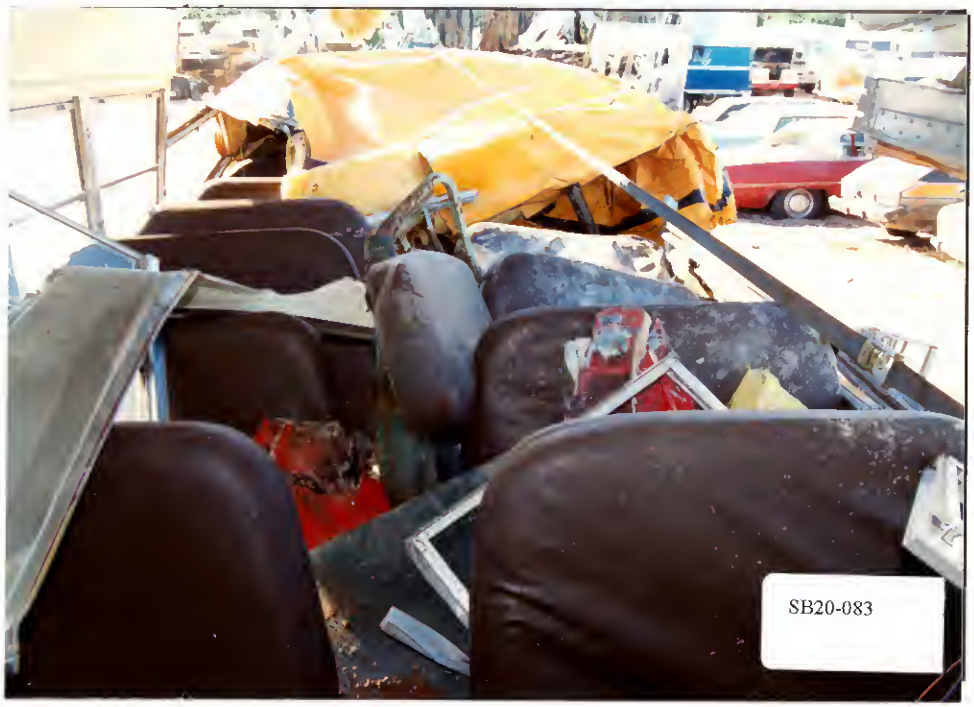
SB20-078


SB20-079


SB20-080


SB20-081


SB20-082


SB20-083


SB20-084


SB20-085


SB20-086


SB20-087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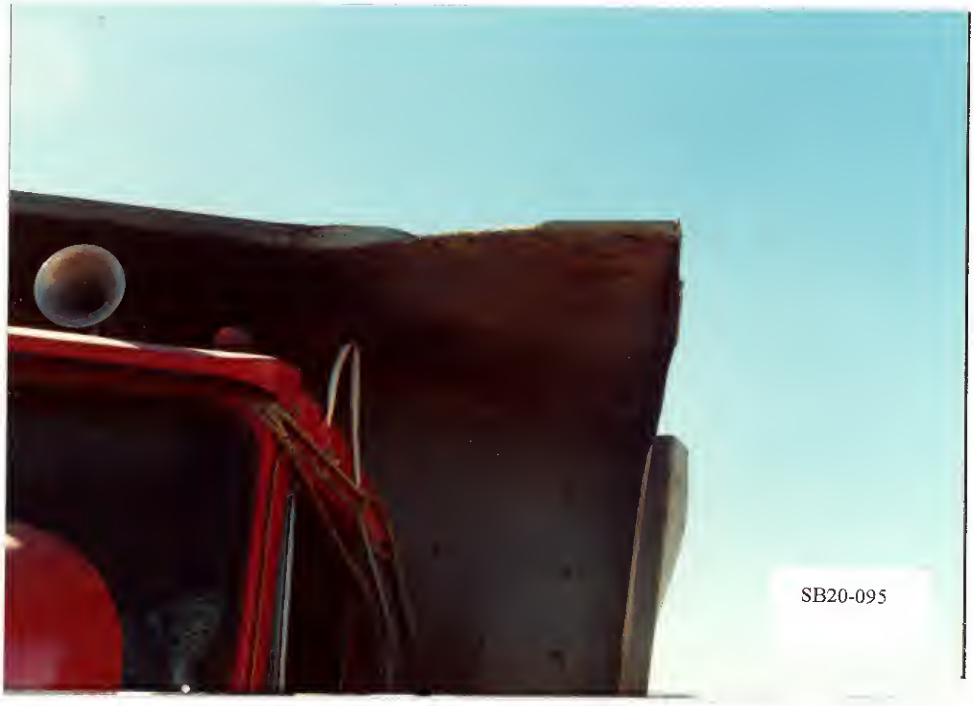
SB20-090


SB20-091


SB20-092


SB20-093
KENWORTH


SB20-094


SB20-095


SB20-096

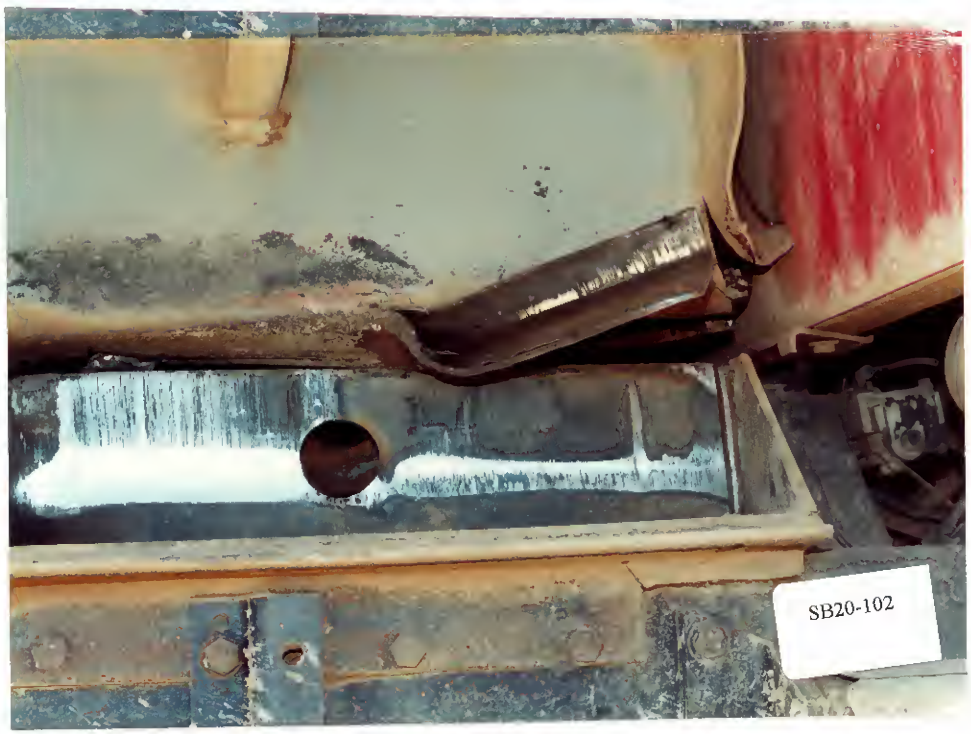

SB20-097


SB20-098


SB20-099


SB20-100


SB20-101


SB20-102


SB20-103


CAUTION
SB20-104


SB20-105


SB20-106
CAUTION
POWER TAKE-OFF
CAUTION
CAUTION
ACR TRUCKING
STOP
ACCIDENTS
IN 1990


SB20-107


SB20-108


FORD
SB20-109


FORD
SB20-110


SB20-111


SB20-112


SB20-113


FORD
SB20-114


SB20-115


SB20-116


SB20-117


SB20-118


SB20-119

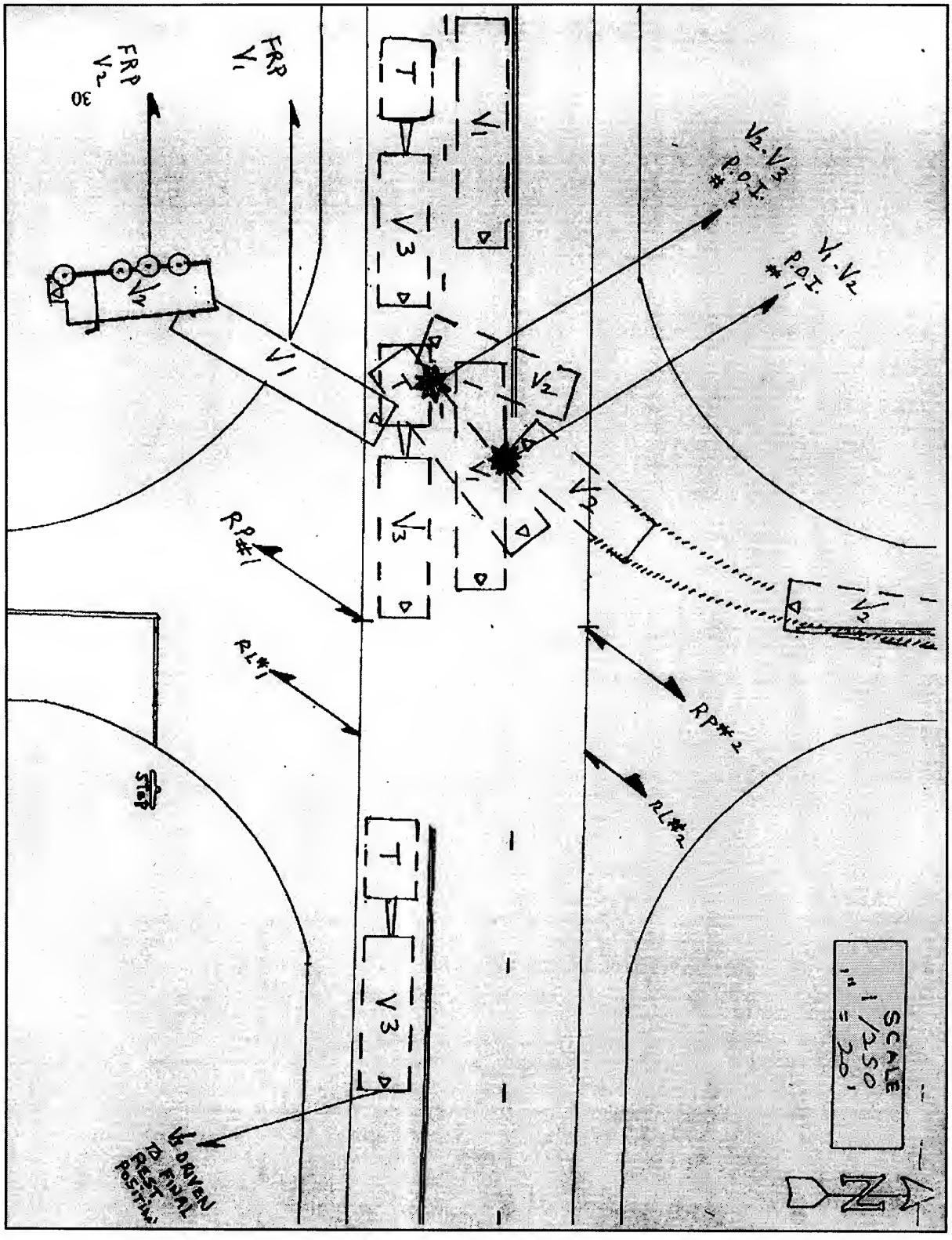

SB20-120


SB20-121


SB20-122


SB20-123

DIAGRAM


FRP V2 30
FRP V1
T
V1
V3
V2.V3 P.O.I. #2
V1.V2 P.O.I. #1
V2
V1
RP#1
RL#1
RP#2
RL#2
STOP
SCALE 1" = 1/250 20'
V1 DRIVEN TO FINAL REST POSITION

SCHOOL BUS SEATING CHART
(Injury Severity by Seating Position)

DRIVER
No Injury

FRONT DOOR

SEAT ROW	1	2	3	4	5	6
1						No Inj.
2	Unk.					
3	AIS-1	Unk.			Unk.	
4	AIS-1		AIS-1	Unk.		AIS-1
5	AIS-2		AIS-2	Unk.		
6	AIS-1				AIS-1	Unk.
7	Unk.	(Unk.	Seat)			
8	AIS-3	(Unk.	Seat)	Unk.		
9	AIS-2			AIS-1		
10	AIS-2	AIS-2		Unk.	Unk.	
11	AIS-1					
12	AIS-5			Unk.		

AISLE

REAR EXIT

Abbreviations Used In Scene And Photographic Documentation

ft	Feet
in	Inches
AIS	Abbreviated Injury Scale
BLF	Begin Left Front
BLR	Begin Left Rear
BRF	Begin Right Front
BRR	Begin Right Rear
CBE	Cab Behind Engine
CCW	Counterclockwise
CDC	Collision Deformation Classification
CG	Center of Gravity
CM	Centimeter
COE	Cab Over Engine
CW	Clockwise
E, EB	East, Eastbound
ELF	End Left Front
ELR	End Left Rear
ERF	End Right Front
ERR	End Right Rear
FRP	Final Rest Position
IP	Intermediate Point
KG	Kilogram
KPH	Kilometers Per Hour
LF	Left Front
LR	Left Rear
M	Meter
N, NB	North, Northbound
NE	Northeast
NW	Northwest
PDOF	Principal Direction of Force
POI	Point of Impact
R	Radius of Curvature
RF	Right Front
RL	Reference Line
RP	Reference Point
RR	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
U.S.	United States Highway
V1	Vehicle Number 1
W, WB	West, Westbound

YEAR	MONTH	DAY	REPORT ID HOUR	NCIC NO.	OFFICER'S ID NO	Agency Report Number
						BEST AVAILABLE

Total No. of Sheets

Total Injuries	Total Fatalities	Estimated Total Damage	Fatal / Hit/Run / Govt. Prop.	District or Grid No.
24	1	■ Over Minimum ☐ Under Minimum	■ Fatal ☐ Hit/Run ☐ Govt. Prop.	

Highway/Road/Street	☐ Inside ■ Outside	City	County
HIGHWAY			

Intersecting Street, Road / M.P. or R.P.	☐ North ☐ South ☐ East ☐ West	☐ Plus ☐ Minus	Distance	☐ Miles ☐ Feet
■ At ☐ From				

TRAFFIC UNIT NO. 1

State	Class	End.	License or Social Security Number	■ Driver ☐ Pedestrian ☐ Pedalcyclist — Name	Sex	* Inj
	A	N			M	

Restrictions	Date of Birth	Address	City	State	Zip Code	Telephone Number
NONE	72					

Plate Number	State	Year	☐ Same Driver	Owner/Carrier Name	Address	City	State	Zip Code
		95						

Body Style	☐ Camper	Make	Color	Year	VIN	Safety Device Code
DUMP TRUCK		KENWORTH	RED	1987	2NKCL2DX9H1	0

Removed to	Removed by	Orders of	Posted Speed Limit	Otc Est Speed	Otc Est Reas
			40	35	0

Insurance Company	Telephone Number	Policy Number	Eff Date / Exp Date

Trailer (Other Unit) Plate No.	State	Year	Description of Trailer or Other Unit

U.S. Government Permits (Issuer and Number)	* Vehicle Type	Number of Axles	G.V.W. (Registered)
U.S. DOT: ICC MC:			

HAZARDOUS MATERIALS PLACARD NUMBER:	Was Hazardous Cargo from the placarded truck released? (Do not include fuel from the vehicle fuel tank.)
1) 4-Digit Placard number: 2) 1-Digit Placard number:	Yes ☐ No ☐

TRAFFIC UNIT NO. 2

State	Class	End.	License or Social Security Number	■ Driver ☐ Pedestrian ☐ Pedalcyclist	Sex	* Inj
	B				F	

Restrictions	Date of Birth	Address	City	State	Zip Code	Telephone Number
NONE	43					

Plate Number	State	Year	☐ Same Driver	Owner/Carrier Name	Address	City	State	Zip Code
		95						

Body Style	☐ Camper	Make	Color	Year	VIN	Safety Device Code
SCHOOL BUS		GMC	Yellow	1985	1GDK6P1B3FV	

Removed to	Removed by	Orders of	Posted Speed Limit	Otc Est Speed	Otc Est Reas
			50	5	5

Insurance Company	Telephone Number	Policy Number	Eff Date / Exp Date

Trailer (Other Unit) Plate No.	State	Year	Description of Trailer or Other Unit

U.S. Government Permits (Issuer and Number)	* Vehicle Type	Number of Axles	G.V.W. (Registered)
U.S. DOT: ICC MC:			

HAZARDOUS MATERIALS PLACARD NUMBER:	Was Hazardous Cargo from the placarded truck released? (Do not include fuel from the vehicle fuel tank.)
1) 4-Digit Placard number: 2) 1-Digit Placard number:	Yes ☐ No ☐

PASSENGERS

Seating Position Diagram

07	04	01
08	05	02
09	06	03

10 Not in Passenger Compart
11 Motorcycle, Bus
12 Other
13 Unknown
14 Pedalcyclist

Safety Devices
1 - None used
2 - Lap belt
3 - Lap & shoulder
4 - Airbag deployed
5 - Child restraint
6 - Protective helmet
7 - Passive belt
8 - Passive & lap
9 - Other
0 - Unknown

Injured Taken to / by

Unit #	Seat Pos	SD	Name	Address	City	State	Age	Sex	Inj
			See NARRATIVE SEATING CHART						

COPY:
FOR:
DATE:

Other Property Damage (Describe)

Owner's Name	Address	City	State	Telephone Number

WITNESSES

Name	Address	City	State	Telephone Number	Age

Photos Taken	Photographer's Name, ID Number, and Agency	Invest. at Scene	Date Invest.	Time Invest.
■ Yes ☐ No		■ Yes ☐ No		

Officer's Signature and ID Number	Agency	Date Completed

01-2704 7/92
FORM B

* Codes for these items are available in Glossary Manual

AM

NORTH

11 - [illegible] WHICH [illegible] SKIDDED
[illegible] NUMBER
☐ YES ☒ NO

12 CITATIONS
UNIT NO. A.R.S. NO. OR CITY CODE

13 - DESCRIBE WHAT HAPPENED

14 - CLASSIFICATION BY TYPE
☐ YES ☒ NO RAN OFF ROADWAY PRIOR TO FIRST HARMFUL EVENT

COLLISION BETWEEN A MOTOR VEHICLE IN TRANSPORT AND
1 ☐ PEDESTRIAN
2 ☒ MOTOR VEHICLE
3 ☐ RAILWAY TRAIN
4 ☐ PEDALCYCLIST
5 ☐ ANIMAL
6 ☐ FIXED OBJECT
7 ☐ OTHER OBJECT

NONCOLLISION INVOLVING A MOTOR VEHICLE IN TRANSPORT
8 ☐ OVERTURNING
9 ☐ OTHER NONCOLLISION

15 - LIGHT CONDITION
CHECK ONLY ONE
☒ DAYLIGHT
☐ DAWN OR DUSK
☐ DARKNESS

YES NO
☐ ☐ STREET LIGHT
☐ ☐ STREET LIGHT FUNCTIONING

16 - WEATHER CONDITIONS
CHECK ONLY ONE
☒ CLEAR
2 ☐ RAINING
3 ☐ CLOUDY
☐ SNOWING
☐ STRONG WIND
☐ DUST
7 ☐ FOG

17 - ROAD SURFACE TYPE
CHECK ONLY ONE
1 ☒ ASPHALT
2 ☐ CONCRETE
☐ GRAVEL
☐ DIRT
☐ OTHER

18 - TYPE OF LOCATION
CHECK ONLY ONE
☒ INTERSECTION
2 ☐ JUNCTION AREA
3 ☐ NON-JUNCTION AREA
☐ DRIVEWAY ACCESS
☐ ALLEY ACCESS

19 - INTERSECTION RELATED
ES ☒ NO ☐

20 - SPECIAL LOCATION
CHECK ONLY ONE
1 ☐ SCHOOL CROSSING
2 ☐ PEDESTRIAN CROSSWALK (STRIPED)
3 ☐ PEDESTRIAN CROSSWALK (NO STRIPING)
4 ☐ BRIDGE
5 ☐ TUNNEL
6 ☐ RR CROSSING
7 ☐ ALLEY
8 ☐ BIKE PATH
9 ☐ 2-WAY LEFT TURN LANE

21 - UNUSUAL ROAD CONDITION
CHECK ONLY ONE
1 ☐ UNDER CONSTRUCTION, TRAFFIC ALLOWED
2 ☐ UNDER CONSTRUCTION, NO TRAFFIC ALLOWED
3 ☐ UNDER REPAIRS
4 ☐ HOLES, RUTS, BUMPS
5 ☐ OBSTRUCTION - PROTECTED
6 ☐ OBSTRUCTION - UNPROTECTED
7 ☐ OBSTRUCTION - UNLIGHTED AT NIGHT
8 ☐ DEFECTIVE SHOULDERS
9 ☐ CHANGING ROAD WIDTH
10 ☐ FLOODED
11 ☐ TEMPORARY LANE CLOSURE

22 - TRAFFIC CONTROL DEVICES
LEGEND: A-DEVICE PRESENT
B-DAMAGED OR NON-FUNCTIONAL PRIOR TO ACCIDENT
CHECK ANY THAT APPLY

	A	B	
1	☐	☐	STOP AND GO SIGNAL
2	☐	☐	YIELD SIGN
3	☒	☐	STOP SIGN
4	☐	☐	WARNING SIGN
5	☐	☐	RAILROAD SIGNAL
6	☐	☐	FLASHING SIGNAL
7	☐	☐	FLAGMAN OR OFFICER

23 - NON INTERSECTION ROAD CHARACTER
CHECK ONLY ONE
1 ☐ 2-WAY STRIPED CENTERLINE
2 ☐ 2-WAY, NO STRIPE
3 ☐ 2-WAY, PAINTED MEDIAN
4 ☐ 2-WAY, RAISED MEDIAN
5 ☐ 2-WAY, BARRIER MEDIAN
6 ☐ 2-WAY, DEPRESSED MEDIAN
7 ☐ 2-WAY, EXTENDED MEDIAN
8 ☐ 1-WAY STREET

24 - ROAD GRADE
CHECK ONLY ONE
1 ☒ LEVEL
2 ☐ DOWNGRADE
3 ☐ UPGRADE
4 ☐ HILLCREST
5 ☐ DIP

25 - UNUSUAL ROAD SURFACE CONDITION
CHECK ONLY ONE
1 ☐ WET
2 ☐ LOOSE SAND, DIRT OR GRAVEL
3 ☐ SNOWY ICY
4 ☐ FRESH OIL
5 ☐ OTHER
6 ☐ UNKNOWN

26 - PHYSICAL CONDITION
TWO CHOICES PER PERSON MAY BE SELECTED

	1	2	
1	☒	☒	NO APPARENT DEFECTS
2	☐	☐	HAD BEEN DRINKING
3	☐	☐	APPEARED TO BE UNDER INFLUENCE OF DRUGS
4	☐	☐	ILL-ABILITY INFLUENCED
5	☐	☐	SLEEPY-FATIGUED
6	☐	☐	OTHER BODILY DEFECTS, INFIRMITIES
7	☐	☐	UNKNOWN

27 - VIOLATIONS/BEHAVIOR
TWO CHOICES PER PERSON MAY BE SELECTED

	1	2	
1	☐	☒	NO IMPROPER DRIVING
2	☐	☐	SPEED TOO FAST FOR CONDITIONS
3	☐	☐	EXCEEDED LAWFUL SPEED
4	☐	☐	FAILED TO YIELD RIGHT-OF-WAY
5	☐	☐	FOLLOWED TOO CLOSELY
6	☒	☐	RAN STOP SIGN
7	☐	☐	DISREGARDED TRAFFIC SIGNAL
8	☐	☐	MADE IMPROPER TURN
9	☐	☐	DROVE IN OPPOSING TRAFFIC LANE
10	☐	☐	KNOWINGLY OPERATED WITH FAULTY OR MISSING EQUIPMENT
11	☐	☐	REQUIRED MOTORCYCLE SAFETY EQUIPMENT NOT USED
12	☐	☐	PASSED IN NO PASSING ZONE
13	☐	☐	UNSAFE LANE CHANGE
14	☐	☐	OTHER UNSAFE PASSING
15	☐	☐	INATTENTION
16	☐	☐	DID NOT USE CROSSWALK
17	☐	☐	WALKED ON WRONG SIDE OF ROAD
18	☐	☐	OTHER
19	☐	☐	UNKNOWN

28 - VEHICLE CONDITION
TWO CHOICES PER VEHICLE MAY BE SELECTED

	1	2	
1	☐	☒	NO APPARENT DEFECTS
2	☒	☐	DEFECTIVE BRAKES
3	☐	☐	DEFECTIVE STEERING
4	☐	☐	DEFECTIVE HEADLIGHTS
5	☐	☐	DEFECTIVE TAIL LIGHTS
6	☐	☐	DEFECTIVE TURN-SIGNAL
7	☐	☐	PUNCTURE OR BLOWOUT
8	☐	☐	ONE OR MORE SMOOTH TIRES
9	☐	☐	FIRE
10	☐	☐	DEFECTIVE WINDSHIELD WIPER
11	☐	☐	DEFECTIVE EXHAUST SYSTEM
12	☐	☐	OTHER DEFECTS
13	☐	☒	NO TRAILER BRAKES
14	☐	☐	UNKNOWN

29 - TRAFFIC UNIT ACTION
CHECK ONE PER UNIT

	1	2	
1	☐	☐	GOING STRAIGHT AHEAD
2	☐	☐	SLOWING IN TRAFFICWAY
3	☐	☐	STOPPED IN TRAFFICWAY
4	☒	☒	MAKING LEFT TURN
5	☐	☐	MAKING RIGHT TURN
6	☐	☐	MAKING U TURN
7	☐	☐	ENTERING ALLEY OR DRIVEWAY
8	☐	☐	LEAVING ALLEY OR DRIVEWAY
9	☐	☐	OVERTAKING/PASSING
10	☐	☐	CHANGING LANES
11	☐	☐	BACKING
12	☐	☐	AVOIDING VEHICLE, OBJECT, PEDESTRIAN
13	☐	☐	ENTERING PARKING POSITION
14	☐	☐	LEAVING PARKING POSITION
15	☐	☐	PROPERLY PARKED
16	☐	☐	IMPROPERLY PARKED
17	☐	☐	DRIVERLESS MOVING VEHICLE
18	☐	☐	CROSSING ROAD
19	☐	☐	WALKING WITH TRAFFIC
20	☐	☐	WALKING AGAINST TRAFFIC
21	☐	☐	STANDING
22	☐	☐	LYING
23	☐	☐	GETTING ON OR OFF VEHICLE
24	☐	☐	WORKING ON OR PUSHING VEHICLE
25	☐	☐	WORKING ON ROAD
26	☐	☐	OTHER
27	☐	☐	UNKNOWN

30 - VISION OBSCUREMENT
CHECK ONE PER UNIT

	1	2	
1	☒	☒	NOT OBSCURED
2	☐	☐	BY PARKED / STOPPED VEHICLE
3	☐	☐	BY MOVING VEHICLE
4	☐	☐	BY BUILDING
5	☐	☐	BY EMBANKMENT
6	☐	☐	BY SIGNBOARD
7	☐	☐	BY HILLCREST
8	☐	☐	BY LOAD ON VEHICLE
9	☐	☐	BY TREES, BUSHES
10	☐	☐	BY HEADLIGHT
11	☐	☐	BY SUN GLARE
12	☐	☐	BECAUSE OF BAD WEATHER
13	☐	☐	OTHER
14	☐	☐	RAIN, SNOW, FOG ON WINDSHIELD
15	☐	☐	WINDSHIELD OBSCURED - OTHER
16	☐	☐	UNKNOWN

FOR ADOT USE

TRAFFIC ACCIDENT REPORT

YEAR	MONTH	DAY	REPORT ID HOUR	NCIC NO.	OFFICER'S ID NO.	Agency Report Number
						- - BEST AVAILABLE

Total No. of Sheets

Total Injuries	Total Fatalities	Estimated Total Damage				District or Grid No
3	24	1	● Over Minimum ☐ Under Minimum	☐ Fatal ☐ Hit/Run ☐ Govt. Prop.		5130

2 LOCATION

Highway/Road/Street	☐ Inside ● Outside	City	County
HIGHWAY			

Intersecting Street, Road / Mile	● At ☐ From	☐ North ☐ South ☐ East ☐ West	☐ Plus ☐ Minus	Distance	☐ Miles ☐ Feet
~ ~ ~					

3 TRAFFIC UNIT NO.

State	Class	End.	License or Social Security Number	● Driver ☐ Pedestrian ☐ Pedalcyclist	Name	Sex	* Inj
	B					M	0

Restrictions	Date of Birth	Address	City	State	Zip Code	Telephone Number
NONE	41					

Plate Number	State	Year	☐ Same as Driver	Owner/Carrier Name	Address	City	State	Zip Code
		95						

Body Style	☐ Camper	Make	Color	Year	VIN	Safety Device Code
TRUCK		FORD	W	1984	1FDNF60H5EV...	0

Removed to	Removed by	Orders of	Posted Speed Limit	Otc Est Speed	Otc Est Reas
DESTINATION	DRIVER	DRIVER	50	30	30

Insurance Company	Telephone Number	Policy Number	Eff Date / Exp Date

Trailer (Other Unit) Plate No.	State	Year	Description of Trailer or Other Unit
		95	HOMEMADE FLAT BED ORANGE IN COLOR

U.S. Government Permits (Issuer and Number)	* Vehicle Type	Number of Axles	G.V.W. (Registered)
U.S. DOT: ICC MC:			

HAZARDOUS MATERIALS PLACARD NUMBER: 1) 4-Digit Placard number: 2) 1-Digit Placard number:

Was Hazardous Cargo from the placarded truck released? (Do not include fuel from the vehicle fuel tank.) Yes ☐ No ☐

4 TRAFFIC UNIT NO.

State	Class	End.	License or Social Security Number	☐ Driver ☐ Pedestrian ☐ Pedalcyclist	Name	Sex	* Inj

Restrictions	Date of Birth	Address	City	State	Zip Code	Telephone Number

Plate Number	State	Year	☐ Same as Driver	Owner/Carrier Name	Address	City	State	Zip Code

Body Style	☐ Camper	Make	Color	Year	VIN	Safety Device Code

Removed to	Removed by	Orders of	Posted Speed Limit	Otc Est Speed	Otc Est Reas

Insurance Company	Telephone Number	Policy Number	Eff Date / Exp Date

Trailer (Other Unit) Plate No.	State	Year	Description of Trailer or Other Unit

U.S. Government Permits (Issuer and Number)	* Vehicle Type	Number of Axles	G.V.W. (Registered)
U.S. DOT: ICC MC:			

HAZARDOUS MATERIALS PLACARD NUMBER: 1) 4-Digit Placard number: 2) 1-Digit Placard number:

Was Hazardous Cargo from the placarded truck released? (Do not include fuel from the vehicle fuel tank.) Yes ☐ No ☐

5 PASSENGERS

Seating Position Diagram

07	04	01
08	05	02
09	06	03

10 Not in Passenger Compart
11 Motorcycle, Bus
12 Other
13 Unknown
14 Pedalcyclist

Safety Devices
1 - None used
2 - Lap belt
3 - Lap & shoulder
4 - Airbag deployed
5 - Child restraint
6 - Protective helmet
7 - Passive belt
8 - Passive & lap
9 - Other
0 - Unknown

Injured Taken to / by

Unit #	Seat Pos	SD	Name	Address	City	State	Age	Sex	Inj

6 Other Property Damage (Describe)

Owner's Name	Address	City	State	Telephone Number

7 WITNESSES

Name	Address	City	State	Telephone Number	Age

Photos Taken	Photographer's Name, ID Number and Agency	Invest. at Scene	Date Invest.	Time
☒ Yes ☐ No		☒ Yes ☐ No	9	

Officer's Signature and ID Number	Agency	Date Completed

* Codes for these items are available in Glossary Manual

YEAR	MONTH	DAY	REPORT ID HOUR	NCIC NO.	OFFICERS ID NO.	Agency Report Number
						BEST AVAILABLE

ZERO POINT IS RP

EDGE IS (S) EDGE HWY

REFERENCE POINT IS POLE # 115 WAY FOR: MEASUREMENTS ARE IN FEET AND TENTHS ☐ FEET AND INCHES ■

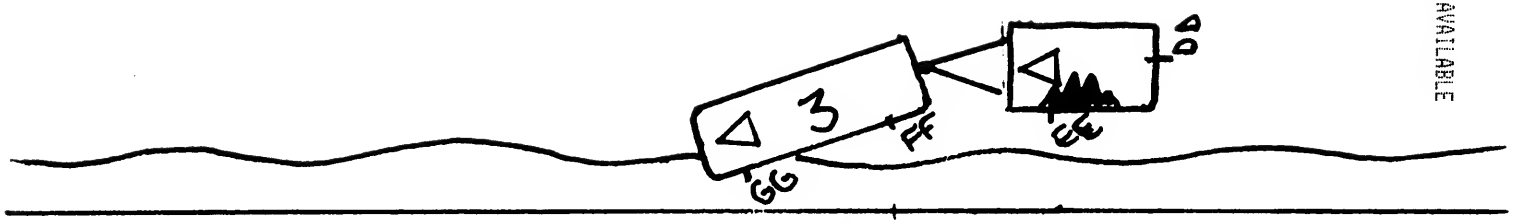
POINT	FROM EDGE	FROM RP	DESCRIPTION OF POINT MEASURED
A	101 8/10 N	33 6/10 E	BEGIN LEFT SKUFF VEH. 1
B	66 10/10 N	33 4/10 E	BEGIN YAW VEH. 1
C	68 3/10 N	25 9/10 E	LIGHT TIRE SKUFF VEH 1 BEGIN
D	42 0/10 N	9 7/10 E	END LIGHT TIRE SKUFF VEH. 1
E	34 2/10 N	12 0/10 E	TIRE SMEAR LEFT SIDE VEH. 1
F	31 9/10 N	26 10/10 E	BEGIN LEFT FRONT SKID MARK V-2
G	30 0/10 N	23 3/10 E	END LEFT FRONT SKID MARK V-2
H	25 7/10 N	33 0/10 E	BEGIN RIGHT FRONT SKID MARK V-2
I	24 3/10 N	22 1/10 E	END RIGHT FRONT SKID MARK V-2
J	19 5/10 N	16 0/10 E	VISIBLE (LIGHT) SKID RF VEH-2
K	22 7/10 N	1 1/10 E	DEFLECTION OF LEFT SKUFF V-1
L	11 1/10 N	12 5/10 W	END VISIBLE TIRE MARKS V-1
M	0 9/10 S	0 8/10 E	RF TIRE VEH 2 FINAL REST
N	25 0/10 S	3 3/10 W	RR TIRE VEH 2 FINAL REST
O	28 7/10 S	17 5/10 W	R FAR REAR TIRE VEH. 1 FINAL
P	33 1/10 S	17 2/10 W	R NEAR REAR TIRE VEH. 1 FINAL
Q	37 3/10 S	17 3/10 W	DISENGAGED FORWARD (R) AXEL VEH 1 FINAL
R	49 0/10 S	15 4/10 W	R FRONT WHEEL VEH. 1 FINAL REST
S	0 6/10 S	16 0/10 E	BEGIN SKID #1 (TRAILER) VEH. 3
T	9 1/10 S	38 6/10 E	BEGIN SKID #2 (TRAILER) VEH. 3
U	11 1/10 S	52 0/10 E	CONNECTION SKIDS #1 & #2 TRAILER V-3
V	13 9/10 S	72 0/10 E	TRAILER SKIDS (TRAILER) EXIT INTERSECT
W	0	167 3/10 E	#1 SKID ENTER ROAD VEH. 3 (TRAILER)
X	0	192 6/10 E	#2 SKID ENTER ROAD VEH. 3 (TRAILER)
Y	12 6/10 N	208 5/10 E	#1 SKID CROSS CENTERLINE V-3 (TRAILER)
Z	12 6/10 N	270 2/10 E	#2 SKID TOUCH CENTERLINE V-3 (TRAILER)
AA	12 6/10 N	321 6/10 E	#1 SKID CROSS BACK CENTERLINE V-3 (TRA
BB	0	342 6/10 E	#2 SKID EXIT ROAD V-3 (TRAILER

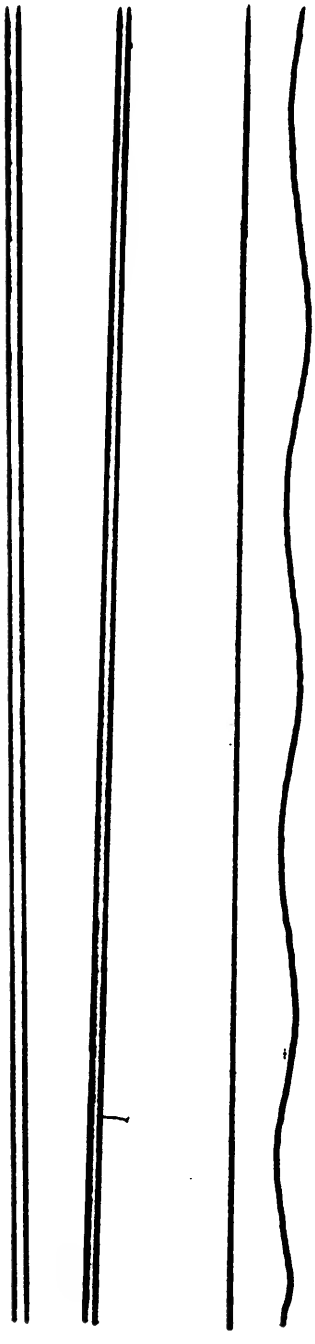
YEAR	MONTH	DAY	REPORT ID HOUR	NCIC NO.	OFFICERS ID NO.	Agency Report Number
						BEST AVAILABLE

ZERO POINT IS ______________ MEASUREMENTS ARE IN FEET AND TENTHS ☐

EDGE IS ______________ REFERENCE POINT IS ______________ FEET AND INCHES ☒

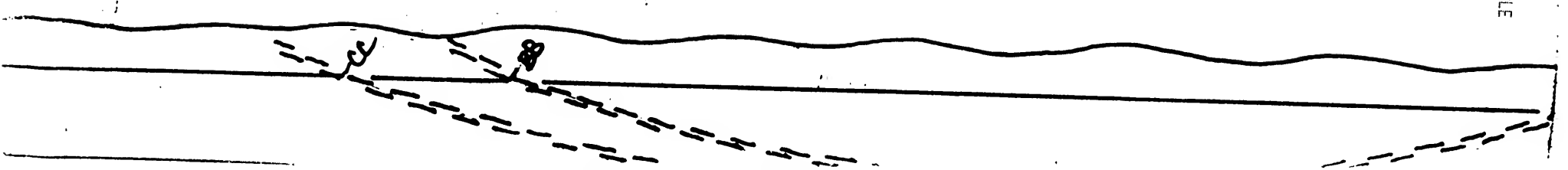
POINT	FROM EDGE	FROM RP	DESCRIPTION OF POINT MEASURED
CC	Ø	365 4 E	#1 SKID EXIT ROAD VEH.3 (TRAILER)
DD	11" S	446" E	(L) FAR REAR AXLE V-3 (TRAILER) RES
EE	10 5 S	452 0 E	(L) FORWARD REAR AXLE V-3 (TRAILER) RE
FF	9" S	474 0 E	LR TIRE V-3 FINAL REST
GG	4" S	488" E	LF TIRE V-3 FINAL REST
		*	CRITICAL SPEED SKUFF FROM V-1
			CORD = 30'
			MIDDLE ORDINATE 14"

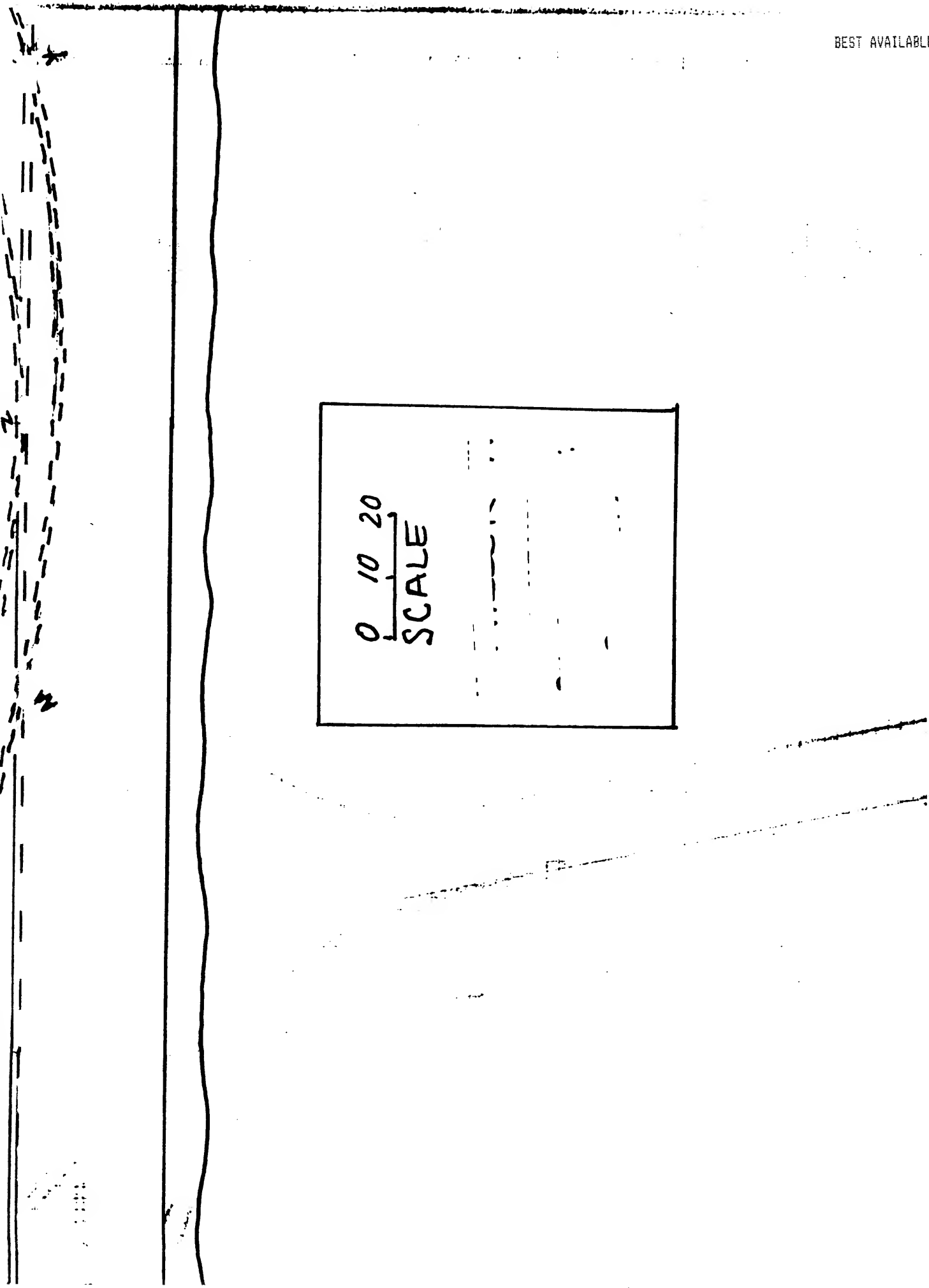


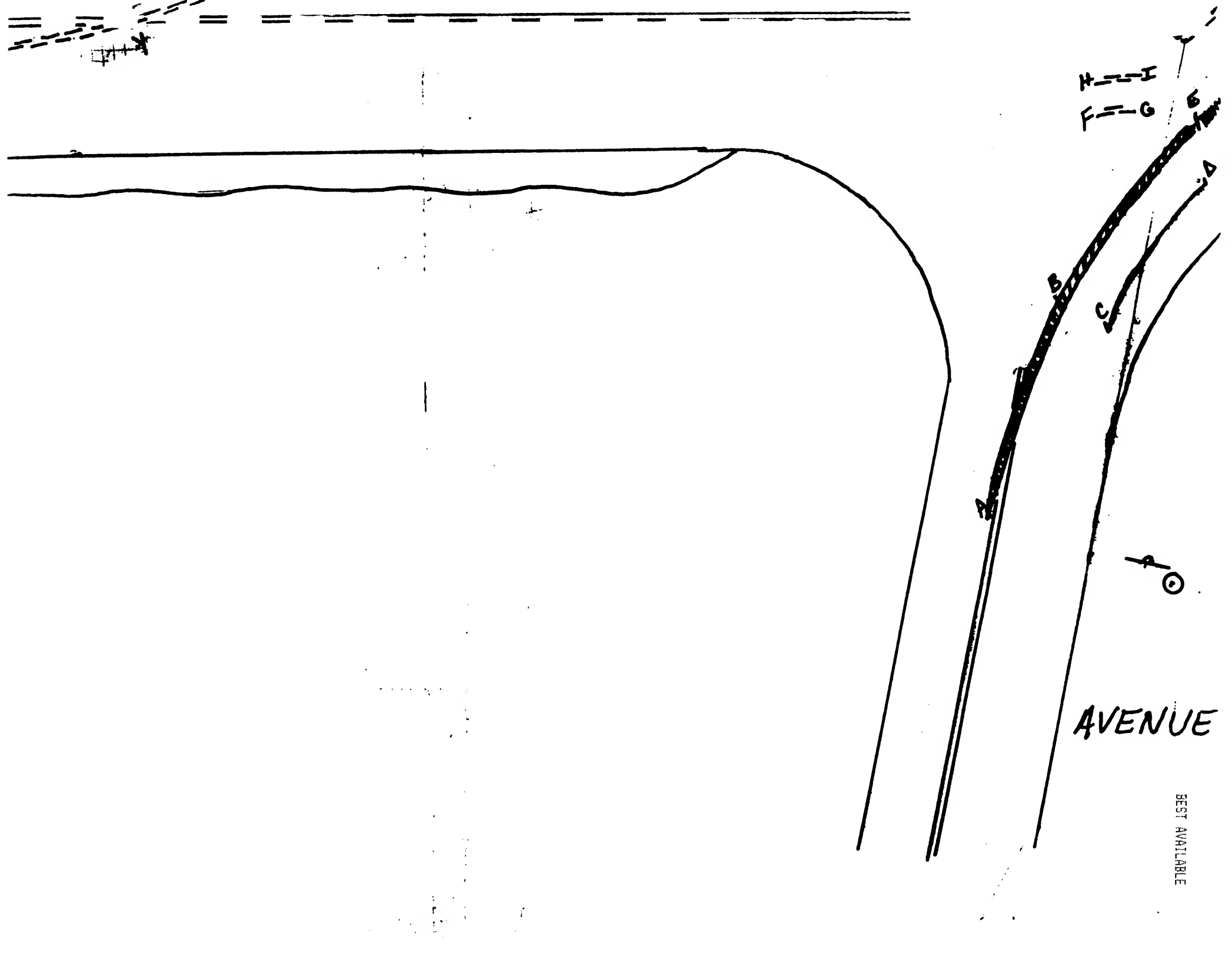


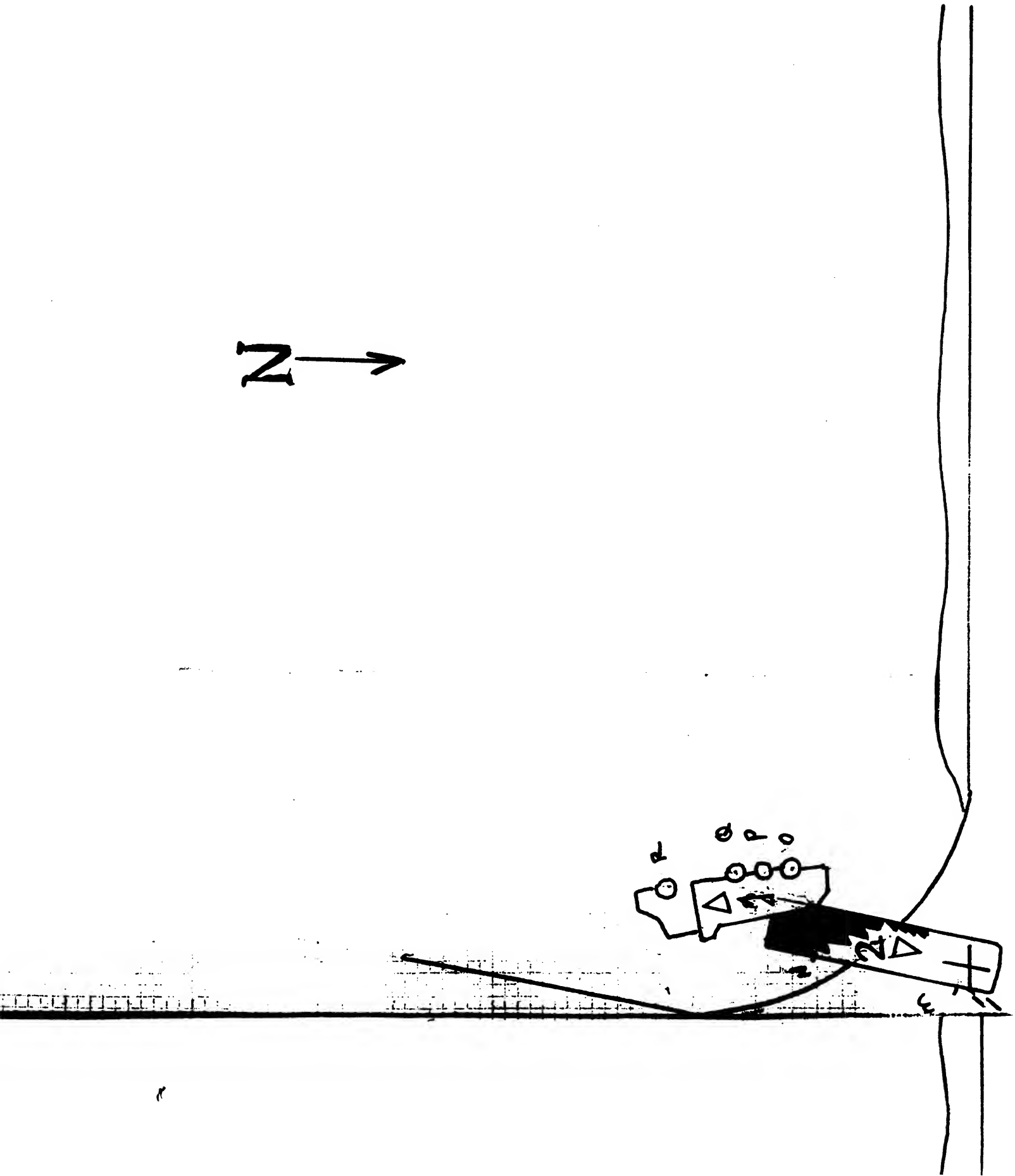
LEGEND

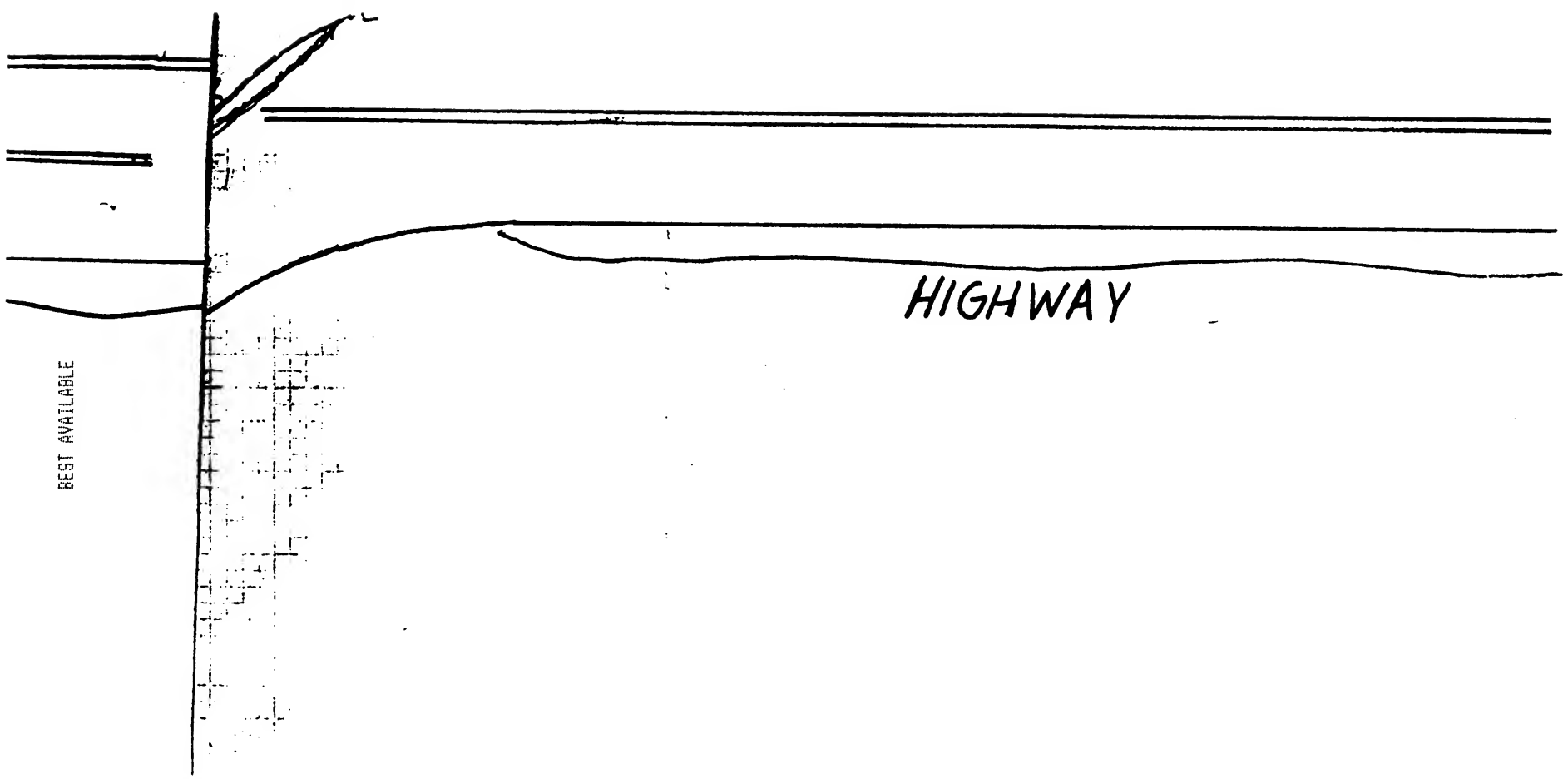
- ⊙ REFERENCE POINT
- ZERO POINT
- SKID MARK
- YAW MARK
- TIRE SMEAR
- SKUFF
- STOP SIGN











EAST

DEPARTMENT
SUPPLEMENTAL ACCIDENT REPORT

On I was assigned to assist in an injury collision that occurred at Avenue East and Highway at approximately hours.

Upon arrival I observed a heavily damaged dump truck lying on its left side next to a heavily damaged school bus. The school bus was missing apptimately one third of the roof and window supports. There were injured children in the bus being treated by adults. There were several people digging in the dump truck load at the rear of the bus.

The dump truck was sitting facing south on its left side and the bus was facing north with a slight easterly cant.

While on scene I assisted with photographs, treating the injured and crowd control as well as obtaining a list of students on that bus.

After the injured were either treated and sent back to the school for transport to Regional Medical Center or transported by medical personnel I assisted with measuring and marking the collision scene.

During this period of time we learned that there was a third vehicle involved in the collision.

At I requested that the medical examiner be advised of a fatality and requested permission to remove the victim from the scene, as well as an autopsy to be performed. Authorization from was given at hours.

At hours I was advised to go to the and to obtain a urine sample from the dump truck driver. While enroute to the district I was advised that the driver had left for in a private vehicle. I requested that an officer meet him at the emergency room to obtain the urine sample and I returned to the collision scene.

At hours Deputy County advised he wanted both vehicles impounded at . I requested two (2) heavy duty tow trucks to the scene. After the vehicles were removed and additional measurements were taken the scene was cleared by all officers.

At hours on I began the State Accident Form and briefed Sgt.

At hours and I went to High School to begin interviewing the victims. There were only two at the school and Corporal completed the interviews.

At hours I received from Sgt. the notes that had been taken at by Police Department officers the previous morning.

At I spoke to Officer of the and was advised that the urine analysis was required by Federal Motor Carrier Regulation and Title 49 of the Revised Statues. Officer had responded to the collision site and had inspected the dump truck. He advised that at the time of the collision the truck only had 25% braking capabilities and that 75% of the brakes were out of adjustment. He further advised that the tag axle was the only axle that was in guidelines for brake adjustment.

At hours I went to the laboratory at Regional Medical Center and obtained a blood sample that had been taken on from the bus driver At hours the blood sample was packaged and placed in the evidence refrigerator at the Office in and labeled

At hours I met with of the County Attorney's Office where we discussed possible charges and obtaining search warrants for an additional mechanical check of the vehicle and the maintenance records for the dump truck, as well as the driver personnel file from the

On I requested a copy of driving record fro M.V.D. This was obtained by Sgt. (of the) County Sheriff's Office.

At approximately hours I completed the Fatal Supplement report and entered the victim's personal property into evidence. It was labeled I then completed the laboratory request form on the blood sample.

At hours I began preparing search warrants for the mechanical inspection of the truck and obtaining the maintenance records and personnel files for I then called the County Attorney's Office and spoke to Deputy County Attorney for a review of the warrants before serving them.

I arrived at hours where I met with and reconstructionist

did his inspection of the vehicle and determined that the truck jake brake was operational. and his team then completed their inspection of the vehicle and the search warrant was completed at hours.

Prior to serving the first search warrant I contacted the Department of Public Safety to have an officer from the special services section assist with the records inspection.

The was closed upon arriving so the search warrant was not served until hours.

Present during the service of the search warrant were myself, r . They furnished us with the documents requested. During the conversation, they advised that a had been trainer with the truck. further said that if the daily inspection sheet does not show any vehicle problems the original copy is discarded.

I then processed the maintenance and personnel files into evidence and labeled them through

At hours the County Attorney's Office authorized removal and return of the victim's personal property from the bus. I removed the property I was able to locate (see attached list) and returned it to in the High School office for distribution.

On at hours Deputy County Attorney held a briefing where the results of the vehicle inspection and search warrants were discussed. Present were and myself. advised that during the on scene inspection the jake brake switch was in the off position and the truck was in gear.

On hours and I served a search warrant at the to retrieve a copy of their maintenance procedure policies.

Upon arrival we spoke to is the District Manager, is the District Comptroller and , is the Vehicle Maintenance Foreman.

advised that they have no written formal policy however, he did explain that every two hundred (200) hours of engine time, or approximately 8000 miles the trucks are serviced, such as lube, oil and filter change and that every 600 hours or 24000 miles the trucks come in for service and a preventative maintenance inspection where they change belts, radiator hoses, coolant and adjust the brakes and fix any other problems found.

also said that the trucks receive an annual safety inspection and a sticker is placed on the truck. When asked about inspection documentation he stated that they don't have a formal check list but they note it in the computer. He then had a copy of the computer entry program given to me. This is listed as on the evidence list. went on to say that he had certified brake inspectors working in the shop but did not currently have that documentation.

We returned to the Substation where I received instruction from E. on how to compare the records and document the information obtained.

During the inspection of the records it was determined that they were at best incomplete (no record of yearly inspection) and that servicing was inconsistent with the verbal policy given by

On hours I spoke to advised that he was the front end loader operator at the pit the morning of the collision and that the he was the one who determined the size of the load the trucks would carry and that he adjusted the load to the size of the truck. He stated that his loader has a six yard scoop and that he put two scoops in vehicle He further stated that vehicle is a 20 yard truck and he put 12 yards in it.

On hours I went to Library where I met with all the available students who had been on the bus at the time of the collision.

I requested and received 21 written statements as to what the students saw that morning. Some of the students still showed signs of the injuries sustained during the collision and were obviously emotionally upset.

At [illegible] came to the Substation and we conducted a taped interview. During the interview she stated that she saw the dump truck a long way from the intersection and when she realized that he wasn't stopping she tried to get out of his way by accelerating the bus. She further stated that the driver of the truck appeared to be trying to avoid the collision by turning the truck. She said that just before the collision he appeared to throw his hands in the air and appeared scared.

xc. 27 (CASE OCC.)

AUTOPSY REPORT

NAME DOB: -80

AUTOPSY NUMBER

BY ORDER OF

DATE OF DEATH

DATE OF AUTOPSY

WHERE PERFORMED

PROSECTOR

FINAL ANATOMIC DIAGNOSIS

Cause of Death:

Immediate Cause of Death; Trauma and asphyxia;
Due to or as a Cause of; Bus vs dump truck accident (collision).

CC:
Records, Department

The autopsy is authorized by , on , at the at approximatelty PM with the help of , and in the presence of Officer of the

The body is of a young, appearing male in his teens. There is an identifying name tag labeled ---, (, BR physician, -76, 119Y M B2'. The body has been identified at the morgue by his father in the presence of .

The body is unembalmed, weighs approximately 120 pounds and measures approximately 66 inches in length. The hair is black. The face shows numerous petechiae. There is blood present in the nares. There is edema and chemosis of the left and right eyes. Uncircumcised. The body is covered partially by a black T-shirt, 'Anchor Blue brand blue jeans, the belt has a 'C' in the buckle, 'British Knights' brand boots, and white socks. The body shows on the right thigh clothing markings drawing the right jean pocket. The right clavicle is fractured. There are areas of bruising noted, one going from the area of fracture of the right clavicle all the way to the mid third of the right arm and another one surrounding the right nipple. There are small excoriations noted in the anterior chest on the left side. Uncircumcised. The posterior aspect reveals deep, penetrating, irregular wounds in the left elbow; there are deep pressure marks with clothing patterned on the posterior chest, and numerous patterns and contused pressure marks are present on the trunk. The anterior chest is assymetric with the left side sunken in relation to the right side.

Incisions: The Y-shaped incision is used to examine the contents of the trunk. The intermastoid incision is used to examine the contents of the head.

There is dissection of the scalp from the skull (avulsion) on the right side. Periostial petechiae are noted. There is liquid blood escaping from the scalp pocket created by the avulsion. There is hemorrhage in to the right temporal area and hemorrhage in the frontoparietal scalp. There is no apparent fracture of the skull. The brain weighs 1620 grams and shows edema. Minimal uncal herniation is present. There is mild subarachnoid hemorrhage on the right parietal occipital area and on the right cerebellar hemisphere.

The chest reveals extensive hemorrhage of the soft tissue anteriorly. There is a fracture of the left fifth rib anteriorly. There is no blood inside the thoracic cavity. Minor hemorrhage is found around the upper thoracic vertebral soft tissue. The thymus weighs 30 grams and appears unremarkable.

The abdomen reveals a retroperitoneal hematoma on the right side extending from the diaphragm below with avulsion of muscle (iliopsoas) along the vertebral column. There is a palpable fracture of the right pelvis. A minimal amount of blood is found inside the upper abdominal cavity

surrounding the spleen.

The heart shows no remarkable features. The endocardium, myocardium and pericardium are unremarkable. The valves show no unusual features. The heart weighs 240 grams. There is a minimal degree of atherosclerosis of the coronary vessels.

The right lung weighs 300 grams; the right lung weighs 250 grams. They show congestion. There is extensive hemorrhage in both lungs, mostly subpleural.

The liver weighs 920 grams. It shows small subcapsular hemorrhage on the right side. The organ has a nutmeg appearance on the cut surface.

The spleen reveals a hilar fracture and blood clots in the hilum. A small accessory spleen is present. The spleen itself weighs 50 grams.

The pancreas is of normal size, shape and appearance. It weighs approximately 40 grams.

The appendix is unremarkable.

The stomach contains no food.

The small and large bowel are unremarkable.

There is a large periadrenal hemorrhage on the right side. The right and left adrenal glands themselves are unremarkable.

The right kidney weighs 110 grams; the left kidney weighs 100 grams. The organs reveal congested medulla and pale cortex. There is hemorrhage in the upper pole of the right kidney. The ureters are unremarkable. The urinary bladder reveals no unusual features. The prostate shows no unusual changes.

Microscopic Examination

Heart: Sections from pericardium, endocardium and myocardium reveal no unusual features. Sections from coronary vessel reveals minimal atherosclerosis. There is no evidence of hemorrhage or unroofing.

Liver: Section from liver reveals central focal congestion with no necrosis of hepatocytes. There is a minimal degree of subcapsular hemorrhage also present.

Lung: Section from lung reveals severe congestion and hemorrhage with no increase in inflammatory infiltrate. The alveolar spaces are of normal thickness. The bronchioles are unremarkable. A minimal degree of anthracosis is present.

Kidney: Section from kidney reveals congestion. No other remarkable features are identified.

Spleen: Section from spleen reveals congestion. The capsule is of normal thickness. The red and white pulp are unremarkable.

CNS: Sections from CNS reveal mild perinuclear clearing and a minimal degree of congestion. There is a minimal degree of subarachnoid hemorrhage noted in the cerebellar section.

MORGUE CASE -

SKULL

A single lateral view was taken showing evidence of air inside the cranium. I suspect a fracture in the temporal region, either on the right or left. There are metallic opacities which could represent artifact.

IMPRESSION: There is evidence of air within the cranial cavity.

CHEST, AP

A very small cardiac silhouette is noted. There is air surrounding the heart suggestive of pneumopericardium. The lungs are not grossly abnormal. There is apparently no pneumothorax. There are multiple artifacts of varying sizes probably representing gravel. No rib fracture is evident.

IMPRESSION: There is evidence of air in the pericardium.

PATIENT NAME:
MEDICAL RECORD #: 00 00 00
PATIENT (BILLING) #:
ROOM #:
AGE:
REFERRING PHYSICIAN:
DATE OF SERVICE:
MEDICAL RECORD REPORT REGIONAL MEDICAL CENTER -

U.S. Department of Transportation

National Highway Traffic Safety Administration

ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number ___ ___

2. Case Number - Stratum DS1-95-SB-020

IDENTIFICATION

3. Number of General Vehicle Forms Submitted 03

4. Date of Accident (Month,Day,Year) FALL / WEEKDAY 9 85

5. Time of Accident MORNING

Code reported military time of accident.

NOTE: Midnight = 2400
Unknown = 9999

SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. ___ SS15 Administrative Use 0

7. ___ SS16 Pedestrian Crash Data Study 0
(Data for this special study available in a separate file.)

8. ___ SS17 Impact Fires 0

9. ___ SS18 Unsafe Driver Actions 0

10. ___ SS19 _____ 0

NUMBER OF EVENTS

11. Number of Recorded Events in This Accident 03

Code the number of events which occurred in this accident.

ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object in the right columnns.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. 01	13. 01	14. 50	15. L	16. 02	17. 60	18. F
19. 02	20. 01	21. 50	22. B	23. 03	24. 60	25. L
26. 03	27. 02	28. 60	29. R	30. 31	31. 00	32. N
33. 04	34. ___ ___	35. ___ ___	36. ___	37. ___ ___	38. ___ ___	39. ___
40. 05	41. ___ ___	42. ___ ___	43. ___	44. ___ ___	45. ___ ___	46. ___

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

CODES FOR CLASS OF VEHICLE

(00) Not a motor vehicle
(01) Subcompact/mini (wheelbase < 254 cm)
(02) Compact (wheelbase ≥ 254 but < 265 cm)
(03) Intermediate (wheelbase ≥ 265 but < 278 cm)
(04) Full size (wheelbase ≥ 278 but < 291 cm)
(05) Largest (wheelbase ≥ 291 cm)
(09) Unknown passenger car size
(14) Compact utility vehicle
(15) Large utility vehicle (≤ 4,500 kgs GVWR)
(16) Utility station wagon (≤ 4,500 kgs GVWR)
(19) Unknown utility type
(20) Minivan (≤ 4,500 kgs GVWR)
(21) Large van (≤ 4,500 kgs GVWR)
(24) Van Based school bus (≤ 4,500 kgs GVWR)
(28) Other van type (≤ 4,500 kgs GVWR)
(29) Unknown van type (≤ 4,500 kgs GVWR)
(30) Compact pickup truck (≤ 4,500 kgs GVWR)
(31) Large pickup truck (≤ 4,500 kgs GVWR)
(38) Other pickup truck (≤ 4,500 kgs GVWR)
(39) Unknown pickup truck type (≤ 4,500 kgs GVWR
(45) Other light truck (≤ 4,500 kgs GVWR)
(48) Unknown light truck type (≤ 4,500 kgs GVWR)
(49) Unknown light vehicle type
(50) School bus (excludes van based)(> 4,500 kgs GVWR)
(58) Other bus (> 4,500 kgs GVWR)
(59) Unknown bus type
(60) Truck (> 4,500 kgs GVWR)
(67) Tractor without trailer
(68) Tractor-trailer(s)
(78) Unknown medium/heavy truck type
(79) Unknown light/medium/heavy truck type
(80) Motored cycle
(90) Other vehicle
(99) Unknown

CODES FOR GENERAL AREA OF DAMAGE (GAD)

CDS APPLICABLE AND OTHER VEHICLES
(0) Not a motor vehicle
(N) Noncollision
(F) Front
(R) Right side
(L) Left side
(B) Back
(T) Top
(U) Undercarriage
(9) Unknown

TDC APPLICABLE VEHICLES
(0) Not a motor vehicle
(N) Noncollision
(F) Front
(R) Right side
(L) Left side
(B) Back of unit with cargo area (rear of trailer or straight truck)
(D) Back (rear of tractor)
(C) Rear of cab
(V) Front of cargo area
(T) Top
(U) Undercarriage
(9) Unknown

CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
(31) Overturn — rollover (excludes end-over-end)
(32) Rollover — end-over-end
(33) Fire or explosion
(34) Jackknife
(35) Other intraunit damage (specify):
_____
(36) Noncollision injury
(38) Other noncollision (specify):
_____
(39) Noncollision — details unknown

Collision With Fixed Object
(41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment
(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
(50) Pole or post (≤ 10 cm in diameter)
(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
(52) Pole or post (> 30 cm in diameter)
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail) (specify):_____
(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify):
_____
(69) Unknown fixed object

Collision with Nonfixed Object
(70) Passenger car, light truck, van, or other vehicle not in-transport
(71) Medium/heavy truck or bus not in-transport
(72) Pedestrian
(73) Cyclist or cycle
(74) Other nonmotorist or conveyance
_____
(75) Vehicle occupant
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(79) Object fell from vehicle in-transport
(88) Other nonfixed object (specify):
_____
(89) Unknown nonfixed object

(98) Other event (specify):
_____
(99) Unknown event or object

U.S. Department of Transportation
National Highway Traffic Safety Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number ____
2. Case Number - Stratum DSL-95-SB-020
3. Vehicle Number 01

VEHICLE IDENTIFICATION

4. Vehicle Model Year 85
   Code the last two digits of the model year
   (99) Unknown

5. Vehicle Make (specify): 23
   GMC
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (99) Unknown

6. Vehicle Model (specify): 981
   School Bus
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (999) Unknown

7. Body Type 50
   Note: Applicable codes may be found on the back of this page.

8. Vehicle Identification Number

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	G	D	K	6	P	1	B	3	F	V	x	x	x	x	x	x

   Left justify; Slash zeros and letter Z (Ø and Z)
   No VIN—Code all zeros
   Unknown—Code all nines

9. Vehicle Special Use (This Trip) 2
   (0) No special use
   (1) Taxi
   (2) Vehicle used as school bus
   (3) Vehicle used as other bus
   (4) Military
   (5) Police
   (6) Ambulance
   (7) Fire truck or car
   (8) Other (specify): _____
   (9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 1
    (0) Not towed due to vehicle damage
    (1) Towed due to vehicle damage
    (9) Unknown

11. Police Reported Travel Speed 008
    Code to the nearest kmph (NOTE: 000 means less than 0.5 kmph)
    (160) 159.5 kmph and above
    (999) Unknown

    05 mph X 1.6093 = 008 kmph

12. Speed Limit 080
    (000) No statutory limit
    Code posted or statutory speed limit in kmph
    (999) Unknown

    50 mph X 1.6093 = 080 kmph

13. Police Reported Alcohol Presence For Driver 0
    (0) No alcohol present
    (1) Yes alcohol present
    (7) Not reported
    (8) No driver present
    (9) Unknown

14. Alcohol Test Result For Driver 96
    Code actual value (decimal implied before first digit—0.xx)
    (95) Test refused
    (96) None given
    (97) AC test performed, results unknown
    (98) No driver present
    (99) Unknown

    Source: PAR

15. Police Reported Other Drug Presence For Driver 0
    (0) No other drug(s) present
    (1) Yes other drug(s) present
    (7) Not reported
    (8) No driver present
    (9) Unknown

16. Other Drug Specimen Test Result For Driver 0
    (0) No specimen test given
    (1) Drug(s) not found in specimen
    (2) Drug(s) found in specimen, (specify): _____
    (3) Specimen test given, results unknown or not obtained
    (8) No driver present
    (9) Unknown if specimen test given

17. Driver's Zip Code
    (00001) Driver not a resident of U.S. or territories
    _____ Code actual 5-digit zip code
    (99998) No driver present
    (99999) Unknown

18. Driver's Race/Ethnic Origin 1
    (1) White (non-Hispanic)
    (2) Black (non-Hispanic)
    (3) White (Hispanic)
    (4) Black (Hispanic)
    (5) American Indian, Eskimo or Aleut
    (6) Asian or Pacific Islander
    (7) Other (specify): _____
    (8) No driver present
    (9) Unknown

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

(01) Convertible (excludes sun-roof, t-bar)
(02) 2-door sedan, hardtop, coupe
(03) 3-door/2-door hatchback
(04) 4-door sedan, hardtop
(05) 5-door/4-door hatchback
(06) Station wagon (excluding van and truck based)
(07) Hatchback, number of doors unknown
(08) Other automobile type (specify):

_____

(09) Unknown automobile type

Automobile Derivatives

(10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
(11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
(12) Large limousine - more than four side doors or stretched chassis
(13) Three-wheel automobile or automobile derivative

Utility Vehicles (≤ 4,536 kgs GVWR)

(14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
(15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
(16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
(19) Utility, unknown body type

Van Based Light Trucks (≤ 4,536 kgs GVWR)

(20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
(21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
(22) Step van or walk-in van (≤ 4,536 kgs GVWR)
(23) Van based motorhome (≤ 4,536 kgs GVWR)
(24) Van based school bus (≤ 4,536 kgs GVWR)
(25) Van based other bus (≤ 4,536 kgs GVWR)
(28) Other van type (Hi-Cube Van, Kary) (specify):

_____

(29) Unknown van type

Light Conventional Trucks (Pickup style cab, ≤ 4,536 kgs GVWR)

(30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10 , T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
(31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
(32) Pickup with slide-in camper
(33) Convertible pickup
(39) Unknown pickup style light conventional truck type

Other Light Trucks (≤ 4,536 kgs GVWR)

(40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
(41) Truck based panel
(42) Light truck based motorhome (chassis mounted)
(45) Other light conventional truck type
(48) Unknown light truck type
(49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

(50) School bus (designed to carry students, not cross country or transit)
(58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):

_____

(59) Unknown bus type

Medium/Heavy Trucks (> 4,536 kgs GVWR)

(60) Step van (> 4,536 kgs GVWR)
(61) Single unit straight truck (4,536 kgs < GVWR ≤ 8,845 kgs)
(62) Single unit straight truck (8,845 kgs < GVWR ≤ 11,793 kgs)
(63) Single unit straight truck (> 11,793 kgs GVWR)
(64) Single unit straight truck, GVWR unknown
(65) Medium/heavy truck based motorhome
(67) Truck-tractor with no cargo trailer
(68) Truck-tractor pulling one trailer
(69) Truck-tractor pulling two or more trailers
(70) Truck-tractor (unknown if pulling trailer)
(78) Unknown medium/heavy truck type
(79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

(80) Motorcycle
(81) Moped (motorized bicycle)
(82) Three-wheel motorcycle or moped
(88) Other motored cycle (minibike, motorscooter) (specify):_____
(89) Unknown motored cycle type

Other Vehicles

(90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
(91) Snowmobile
(92) Farm equipment other than trucks
(93) Construction equipment other than trucks
(97) Other vehicle type
(99) Unknown body type

PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction — 2
    (0) Non-interchange area and non-junction
    (1) Interchange area related

    Non-Interchange junctions
    (2) Intersection related
    (3) Driveway, alley access related
    (4) Other junction (specify) _____
    (5) Unknown type of junction

    (9) Unknown

20. Trafficway Flow — Ø
    (0) Not physically divided (two way traffic)
    (1) Divided trafficway-median strip without positive barrier
    (2) Divided trafficway-median strip with positive barrier
    (3) One way traffic
    (9) Unknown

21. Number Of Travel Lanes — 3
    (1) One
    (2) Two
    (3) Three
    (4) Four
    (5) Five
    (6) Six
    (7) Seven or more
    (9) Unknown

22. Roadway Alignment — 1
    (1) Straight
    (2) Curve right
    (3) Curve left
    (9) Unknown

23. Roadway Profile — 1
    (1) Level
    (2) Uphill grade (>2%)
    (3) Hill crest
    (4) Downhill grade (>2%)
    (5) Sag
    (9) Unknown

24. Roadway Surface Type — 2
    (1) Concrete
    (2) Bituminous (asphalt)
    (3) Brick or block
    (4) Slag, gravel, or stone
    (5) Dirt
    (8) Other (specify): _____
    (9) Unknown

25. Roadway Surface Condition — 1
    (1) Dry
    (2) Wet
    (3) Snow or slush
    (4) Ice
    (5) Sand, dirt, or oil
    (8) Other (specify): _____
    (9) Unknown

26. Light Conditions — 1
    (1) Daylight
    (2) Dark
    (3) Dark, but lighted
    (4) Dawn
    (5) Dusk
    (9) Unknown

27. Atmospheric Conditions — Ø
    (0) No adverse atmospheric-related driving conditions
    (1) Rain
    (2) Sleet/hail
    (3) Snow
    (4) Fog
    (5) Rain and fog
    (6) Sleet and fog
    (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____
    (9) Unknown

28. Traffic Control Device — Ø
    (0) No traffic control(s)
    (1) Traffic control signal (not RR crossing)

    Regulatory
    (2) Stop sign
    (3) Yield sign
    (4) School zone sign
    (5) Other regulatory sign (specify): _____
    (6) Warning sign (not RR crossing)
    (7) Unknown sign
    (8) Miscellaneous/other controls including RR controls (specify): _____
    (9) Unknown

29. Traffic Control Device Functioning — Ø
    (0) No traffic control device
    (1) Traffic control device not functioning (specify): _____
    (2) Traffic control device functioning properly
    (9) Unknown

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) Ø 1
(00) No driver present
(01) Attentive or not distracted
(02) Looked but did not see

Distractions
(03) By other occupant(s), (specify): _____
(04) By moving object in vehicle (specify): _____
(05) While talking or listening to cellular phone (specify location and type of phone): _____
(06) While dialing cellular phone (specify location and type of phone): _____
(07) While adjusting climate controls
(08) While adjusting radio, cassette, CD (specify): _____
(09) While using other device/controls integral to vehicle (specify): _____
(10) While using or reaching for device/object brought into vehicle (specify): _____
(11) Sleepy or fell asleep
(12) Distracted by outside person, object, or event (specify): _____
(13) Eating or drinking
(14) Smoking related
(97) Distracted/inattentive, details unknown
(98) Other, distraction (specify): _____
(99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) Ø 1
(00) No driver present
(01) Going straight
(02) Decelerating in traffic lane
(03) Accelerating in traffic lane
(04) Starting in traffic lane
(05) Stopped in traffic lane
(06) Passing or overtaking another vehicle
(07) Disabled or parked in travel lane
(08) Leaving a parking position
(09) Entering a parking position
(10) Turning right
(11) Turning left
(12) Making a U-turn
(13) Backing up (other than for parking position)
(14) Negotiating a curve
(15) Changing lanes
(16) Merging
(17) Successful avoidance maneuver to a previous critical event
(97) Other (specify): _____
(99) Unknown

32. Critical Precrash Event 6 6

THIS VEHICLE LOSS OF CONTROL DUE TO:
(01) Blow out or flat tire
(02) Stalled engine
(03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
(04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
(05) Poor road conditions (puddle, pot hole, Ice, etc.) (specify): _____
(06) Traveling too fast for conditions
(08) Other cause of control loss (specify): _____
(09) Unknown cause of control loss

THIS VEHICLE TRAVELLING
(10) Over the lane line on left side of travel lane
(11) Over the lane line on right side of travel lane
(12) Off the edge of the road on the left side
(13) Off the edge of the road on the right side
(14) End departure
(15) Turning left at intersection
(16) Turning right at intersection
(17) Crossing over (passing through) intersection
(18) This vehicle decelerating
(19) Unknown travel direction

OTHER MOTOR VEHICLE IN LANE
(50) Other vehicle stopped
(51) Traveling in same direction with lower steady speed
(52) Traveling in same direction while decelerating
(53) Traveling in same direction with higher speed
(54) Traveling in opposite direction
(55) In crossover
(56) Backing
(59) Unknown travel direction of other motor vehicle in lane

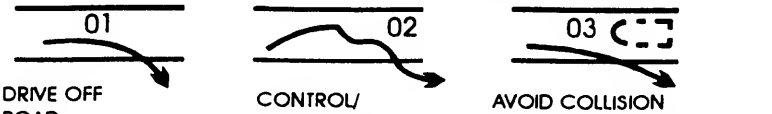
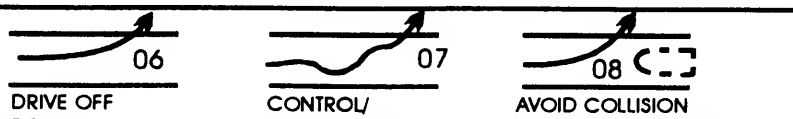
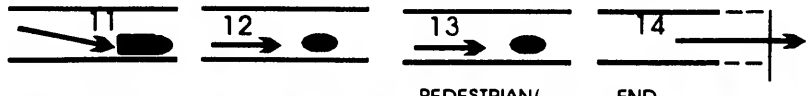
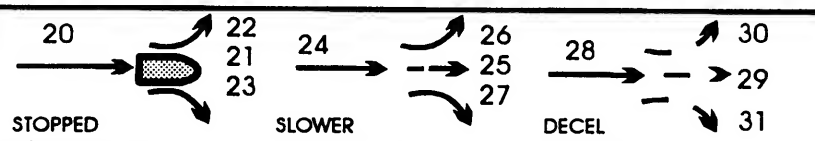
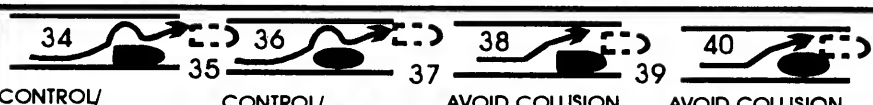
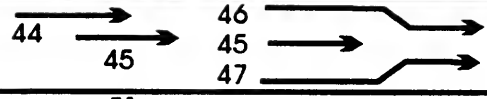
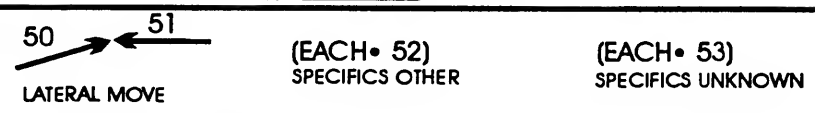
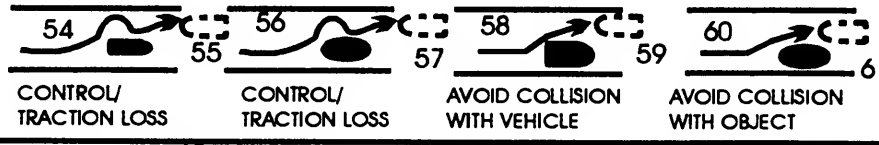
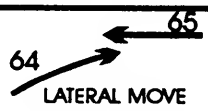
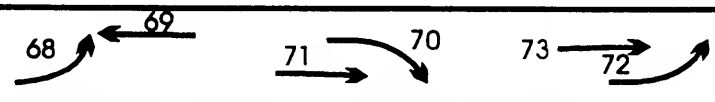
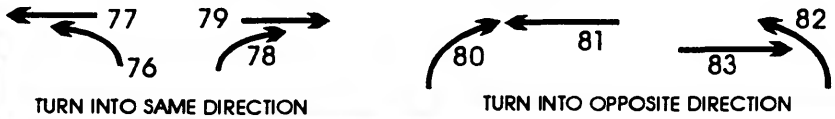
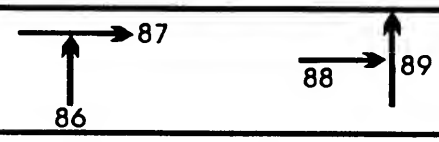
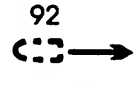
OTHER MOTOR VEHICLE ENCROACHING INTO LANE
(60) From adjacent lane (same direction)—over left lane line
(61) From adjacent lane (same direction)—over right lane line
(62) From opposite direction—over left lane line
(63) From opposite direction—over right lane line
(64) From parking lane
(65) From crossing street, turning into same direction
(66) From crossing street, across path
(67) From crossing street, turning into opposite direction
(68) From crossing street, intended path not known
(70) From driveway, turning into same direction
(71) From driveway, across path
(72) From driveway, turning into opposite direction
(73) From driveway, intended path not known
(74) From entrance to limited access highway
(78) Encroachment by other vehicle—details unknown

PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST
(80) Pedestrian in roadway
(81) Pedestrian approaching roadway
(82) Pedestrian—unknown location
(83) Pedalcyclist or other nonmotorist in roadway

(specify): _____
(84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
(85) Pedalcyclist or other nonmotorist—unknown location

(specify): _____

OBJECT OR ANIMAL
(87) Animal in roadway
(88) Animal approaching roadway
(89) Animal—unknown location
(90) Object in roadway
(91) Object approaching roadway
(92) Object—unknown location
(98) Other critical precrash event (specify): _____
(99) Unknown

Category	Configuration	ACCIDENT TYPES (Includes Intent)
I Single driver	A. Right Roadside Departure	
	B. Left Roadside Departure	
	C. Forward Impact	
II Same Trafficway Same Direction	D. Rear-End	
	E. Forward Impact	
	F. Sideswipe/ Angle	
III Same Trafficway Opposite Direction	G. Head-On	
	H. Forward Impact	
	I. Sideswipe/ Angle	
IV Change Trafficway Vehicle Turing	J. Turn Across Path	
	K. Turn Into Path	
V Intersecting Paths (Vehicle Damage)	L. Straight Paths	
VI. Miscel-laneous	M. Backing Etc.	 98 Other Accident Type 99 Unknown Accident Type 00 No Impact

33. Attempted Avoidance Maneuver 10
(00) No driver present
(01) No avoidance maneuver
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(98) Other action (specify):
_____
(99) Unknown

34. Pre-Impact Stability 1
(0) No driver present
(1) Tracking
(2) Skidding longitudinally—rotation less than 30 degrees
(3) Skidding laterally—clockwise rotation
(4) Skidding laterally—counterclockwise rotation
(7) Other vehicle loss-of-control (specify):
_____
(9) Precrash stability unknown

35. Pre-Impact Location 1
(0) No driver present
(1) Stayed in original travel lane
(2) Stayed on roadway but left original travel lane
(3) Stayed on roadway, not known if left original travel lane
(4) Departed roadway
(5) Remained off roadway
(6) Returned to roadway
(7) Entered roadway
(9) Unknown

36. Accident Type 89
(Note: Applicable codes on back of this page)
(00) No impact
Code the number of the diagram that best describes the accident circumstance
(98) Other accident type (specify):
_____
(99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

OCCUPANT RELATED

37. Driver Presence in Vehicle ____
(0) Driver not present
(1) Driver present
(9) Unknown

38. Number of Occupants This Vehicle ____ ____
(00-96) Code actual number of occupants for this vehicle
(97) 97 or more
(99) Unknown

39. Number of Occupant Forms Submitted ____ ____

AIR BAG RELATED

40. Is this an AOPS Vehicle? ____
(0) No (includes unknown)
(1) Yes - researcher determined
(2) VIN determined air bag system
(3) VIN determined automatic (passive) belts
(4) VIN determined air bag and automatic (passive) belts

41. Air Bag(s) Deployment, First Seat Frontal ____
(0) Not equipped or not available
(1) No air bags deployed

Single Air Bag Vehicle
(2) Driver air bag deployed
(3) Driver air bag, unknown if deployed

Multiple Air Bag Vehicle
(4) Driver side only deployed
(5) Passenger side only deployed
(6) Driver and passenger side deployed
(7) Driver and passenger side unknown if deployed
(8) Air bag(s) deployed, details unknown
(9) Unknown

42. Air Bag(s) Deployment, Other Than First Seat Frontal ____
(0) Not equipped with an "other" air bag
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, details unknown
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Specify type of "other" air bag present: _____

_____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight ___,___ ___ 0
____ Code weight to nearest 10 kilograms.
(045) Less than 454 kilograms
(612) 6,124 kilograms or more
(999) Unknown
__ __,__ __ __ lbs X .4536 = __,__ __ __ kgs

Source: _____

44. Vehicle Cargo Weight ___,___ ___ 0
____ Code weight to nearest 10 kilograms.
(000) Less than 5 kilograms
(454) 4,536 kilograms or more
(999) Unknown
__ __,__ __ __ lbs X .4536 = __,__ __ __ kgs

Source: _____

ROLLOVER DATA

45. Rollover ____
(00) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)
(01-16) Code the number of quarter turns
(17) Rollover, 17 or more quarter turns (specify): _____
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)
(99) Rollover (overturn), details unknown

46. Rollover Initiation Type ____
(00) No rollover
(01) Trip-over
(02) Flip-over
(03) Turn-over
(04) Climb-over
(05) Fall-over
(06) Bounce-over
(07) Collision with another vehicle
(08) Other rollover initiation type specify):

_____
(98) Rollover--end-over-end
(99) Unknown rollover initiation type

47. Location of Rollover Initiation ____
(0) No rollover
(1) On roadway
(2) On shoulder—paved
(3) On shoulder—unpaved
(4) On roadside or divided trafficway median
(8) Rollover--end-over-end
(9) Unknown

48. Rollover Initiation Object Contacted ____ ____
(Note: Applicable codes on back of page)

49. Location on Vehicle Where Initial Principal Tripping Force Is Applied ____
(0) No rollover
(1) Wheels/tires
(2) Side plane
(3) End plane
(4) Undercarriage
(5) Other location on vehicle (specify):

_____
(6) Non-contact rollover forces (specify):

_____
(8) Rollover--end-over-end
(9) Unknown

50. Direction of Initial Roll ____
(0) No rollover
(1) Roll right - primarily about the longitudinal axis
(2) Roll left - primarily about the longitudinal axis
(8) Rollover--end-over-end
(9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover
(01-30) — Vehicle Number

Noncollision
(31) Turn-over — fall-over
(32) No rollover impact initiation (end-over-end)
(34) Jackknife

Collision With Fixed Object
(41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
(50) Pole or post (≤ 10 cm in diameter)
(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
(52) Pole or post (> 30 cm in diameter)
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail) (specify):_____

(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify):

_____
(69) Unknown fixed object

Collision with Nonfixed Object
(70) Passenger car, light truck, van, or other vehicle not in-transport
(71) Medium/heavy truck or bus not in-transport
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(79) Object fell from vehicle in-transport
(88) Other nonfixed object (specify):

_____
(89) Unknown nonfixed object

(98) Other event (specify):

_____
(99) Unknown event or object

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) ____

52. Rear Override/Underride (this Vehicle) ____

(0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

Override (see specific CDC)
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
(1) 1st CDC
(2) 2nd CDC
(3) Other not automated CDC (specify):

_____

Underride (see specific CDC)
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
(4) 1st CDC
(5) 2nd CDC
(6) Other not automated CDC (specify):

_____

(7) Medium/heavy truck or bus override (of any configuration)
(9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
(996) Non-horizontal impact
(997) Noncollision
(998) Impact with object
(999) Unknown

53. Heading Angle For This Vehicle ___ ___ ___

54. Heading Angle For Other Vehicle ___ ___ ___

RECONSTRUCTION DATA

55. Towed Trailing Unit ____
(0) No towed unit
(1) Yes—towed trailing unit
(9) Unknown

56. Documentation of Trajectory Data for This Vehicle ____
(0) No
(1) Yes

57. Post Collision Condition of Tree or Pole (For Highest Delta V) ____
(0) Not collision (for highest delta V) with tree or pole
(1) Not damaged
(2) Cracked/sheared
(3) Tilted < 45 degrees
(4) Tilted ≥ 45 degrees
(5) Uprooted tree
(6) Separated pole from base
(7) Pole replaced
(8) Other (specify):

_____

(9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) ___ ___

(00) No vehicle inspection

Delta V Calculated
(01) Reconstruction program-damage only routine
(02) Reconstruction program-damage and trajectory routine
(03) Missing vehicle algorithm

Delta V Not Calculated
(04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstuction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

(05) Rollover
(06) Other non-horizontal forces
(07) Sideswipe type damage
(08) Severe override
(09) Yielding object
(10) Overlapping damage
(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):

_____

_____

(98) Other, (specify): _____

_____

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V — Highest ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

60. Longitudinal Component of Delta V — Highest + − ___ ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: __000 means greater than −0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(__999) Unknown

61. Lateral Component of Delta V — Highest + − ___ ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: __000 means greater than −0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(__999) Unknown

62. Energy Absorption — Highest ___ ___ ___, ___ 0 0

_____ Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

63. Impact Speed — Highest ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(998) Trajectory algorithm not run
(999) Unknown

DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V) ___
(0) No reconstruction
(1) Collision fits model — results appear reasonable
(2) Collision fits model — results appear high
(3) Collision fits model — results appear low
(4) Borderline reconstruction — results appear reasonable

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed — Highest ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

ESTIMATED DELTA V

66. Estimated Highest Delta V (Researcher Determined) ____
    (0) Reconstruction Delta V coded

    Estimated Delta V
    (1) Less than 10 kmph
    (2) ≥ 10 kmph but < 25 kmph
    (3) ≥ 25 kmph but < 40 kmph
    (4) ≥ 40 kmph but < 55 kmph
    (5) ≥ 55 kmph

    Other estimates of damage severity
    (6) Minor
    (7) Moderate
    (8) Severe

    (9) Unknown

INSPECTION TYPE

67. Type of Vehicle Inspection ____
    (0) No inspection
    (1) Vehicle fully repaired-no damage evident
    (2) Partial inspection (specify):
    _____
    (3) Complete inspection

DELTA V EVENT NUMBER

68. Delta V Event Number ____
    _____ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle
    (99) Unknown

***** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), *****

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

***** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE *****

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,

OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

U.S. Department of Transportation
National Highway Traffic Safety Administration

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number ___ ___
2. Case Number - Stratum DSI-95-SB0020
3. Vehicle Number 01

VEHICLE IDENTIFICATION

VIN 1GDK6P1B3FY xxxxxx Model Year 85

Vehicle Make (specify): GMC Vehicle Model (specify): BLUEBIRD SCHOOL BUS.

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	BEGINS 480cm FROM FRONT AXLE	BEGINS 335cm FROM FRONT AXLE	C6
02	UEW	UEW	RR BUMPER CORNER

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage Width (CDC)	Direct Damage Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D
01	LEFT SIDE		35.6	769	30.6	27.9	20.3	24.1	25.4	35.6	
	(BELOW WINDOWS)				C_7	C_8	C_9	C_{10}	C_{11}	C_{12}	
					33.0	33.0	30.5	20.3	11.4	4.4	
*NOTE	12 "C" MEAS. TAKEN @ SEAT I THROUGH 12 POSITIONS (2) SIDE										
02	REAR BUMPER	96	147	/							

ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	277.0	inches	x	2.54	=	704 cm
Overall Length	433.0	inches	x	2.54	=	1100 cm
Maximum Width	096.0	inches	x	2.54	=	244 cm
Curb Weight	N/A	pounds	x	.4536	=	.N/A kg
Average Track	N/A.	inches	x	2.54	=	N/A cm
Front Overhang	030.0	inches	x	2.54	=	076 cm
Rear Overhang	126.0	inches	x	2.54	=	050 cm
Undeformed End Width	N/A.	inches	x	2.54	=	N/A cm
Engine Size: cyl./displ.	6000	cc	x	.001	=	6.0 L
	366	CID	x	.0164	=	6.0 L

CASE NUMBER D59520

MISSING DATA

THE FOLLOWING DATA ARE NOT INCLUDED IN THIS CASE:

PAGE NUMBER(S)

2

DAMAGE DESCRIPTION

Tire—Wheel Damage
Rotation physically restricted
RF 2 For rear wheels
LF 2 circle axle(s)
RR 2 2 3
LR 2

(1) Yes, (2) No, (8) NA, (9) Unk.

Vehicle No.: 1

TYPE OF TRANSMISSION

___Manual ___Automatic

Front Track: 201.00
Cab Width: 231.00
Curb Weight: _____.
Overall Length: _____.
Engine Size: cyl._____
displ._____

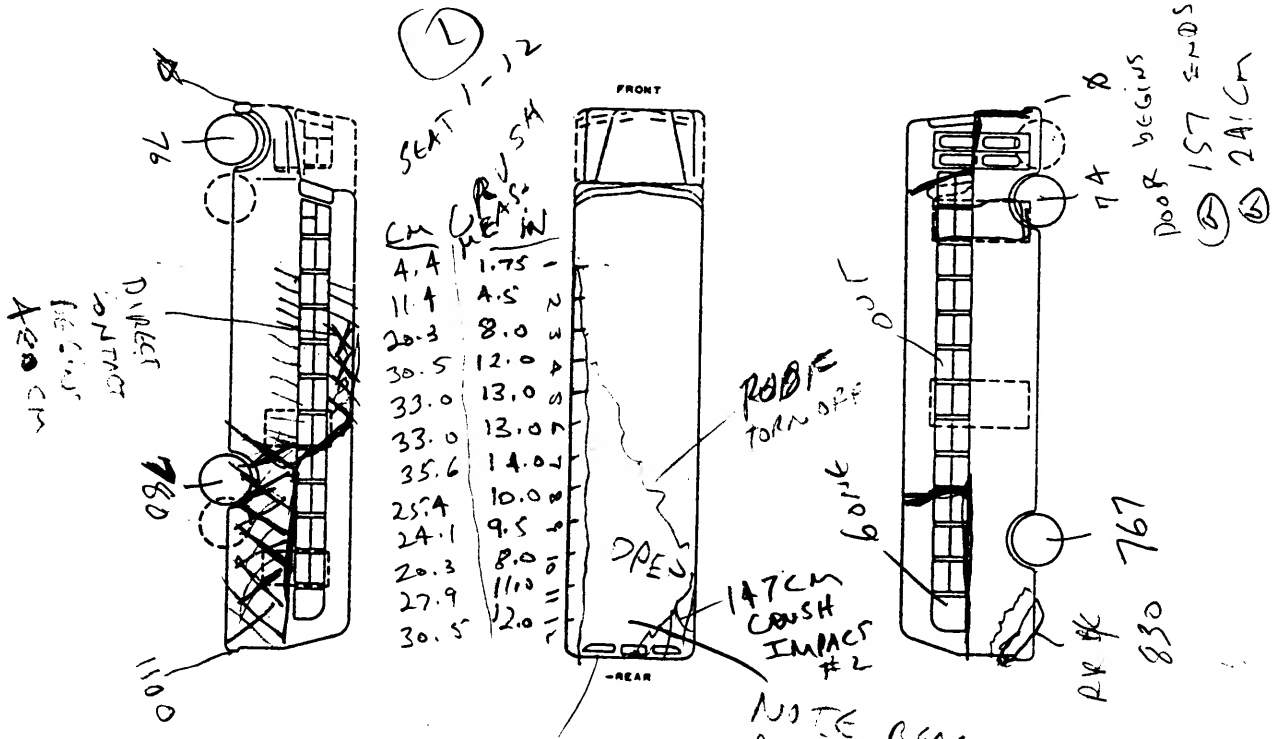
WHEEL STEER ANGLES

(For locked front wheels or displaced rear axles only)

RF ±___ ___° For rear wheels
LF ±___ ___° circle axle(s)
RR ±___ ___° 2 3
LR ±___ ___°
Within ± 5 degrees

FRONT CONVENTIONAL

FRONT FORWARD CONTROL



LEFT SIDE ALL WINDOWS FROM 3RD + BROKEN

REAR CONVENTIONAL

REAR FORWARD CONTROL

Note: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewall, etc.)

If pulling trailer sketch [illegible] trailer and damage [illegible]

Annotate any tires which are deflated due to damage [illegible]

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
- (31) Overturn — rollover (excludes end-over-end)
- (32) Rollover—end-over-end
- (33) Fire or explosion
- (34) Jackknife
- (35) Other intraunit damage (specify): ____________
- (36) Noncollision injury
- (38) Other noncollision (specify): ____________
- (39) Noncollision — details unknown

Collision With Fixed Object
- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify): ____________
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): ____________
- (69) Unknown fixed object

Collision with Nonfixed Object
- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance ____________
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): ____________
- (89) Unknown nonfixed object
- (98) Other event (specify): ____________
- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___
___ ___	___ ___	___ ___ ___	___ ___	___	___	___	___	___ ___

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4.___ ___	5.___ ___	6.___ ___	7.___	8.___	9.___	10.___	11.___ ___

Second Highest Delta "V"

12.___ ___	13.___ ___	14.___ ___	15.___	16.___	17.___	18.___	19.___ ___

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L	21. C_1	C_2	C_3	C_4	C_5	C_6	22. ±D
___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	+ − ___ ___ ___

Second Highest Delta "V"

23. L	24. C_1	C_2	C_3	C_4	C_5	C_6	25. ±D
___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	+ − ___ ___ ___

26. Undeformed End Width ___ ___ ___
(Coded when highest severity impact is an end plane impact.)
____ Code to the nearest centimeter
(250) 250 centimeters or more
(998) No highest severity end plane impact
(999) Unknown

27. Direct Damage Width ___ ___ ___
(For highest severity impact)
____ Code to the nearest centimeter
(250) 250 centimeters or more
(999) Unknown

28. Original Wheelbase ___ ___ ___
____ Code to the nearest centimeter
(650) 650 centimeters or more
(999) Unknown
___ ___ ___ . __ inches X 2.54 = ___ ___ ___ centimeters

29. Original Average Track Width ___ ___ ___
____ Code to the nearest centimeter
(185) 185 centimeters or more
(999) Unknown
___ ___ ___ . __ inches X 2.54 = ___ ___ ___ centimeters

30. Are CDCs Documented but Not Coded on The Automated File? ϕ
(0) No
(1) Yes

31. Researcher's Assessment of Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 1
(0) No post manufacturer modifications
(1) Yes - post manufacturer modifications (specify): BLUE BIRD SCHOOL BUS CHASSIS
(Include photograph of CERTIFICATION PLACARD in case report)
(9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence ϕ
(0) No fire

Yes, fire occurred
(1) Minor
(2) Major
(9) Unknown

34. Origin of Fire ϕ
(0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____
(9) Unknown

FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap 9
36. Location of Fuel Tank-2 Filler Cap 9
(0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle) on left side plane
(3) Aft of center of the rear wheels (rear axle) on right side plane
(4) Forward of center of the rear wheels (rear axle) on left side plane
(5) Forward of center of the rear wheels (rear axle) on right side plane
(6) Over the center of the rear wheels (rear axle) on left side plane
(7) Over the center of the rear wheels (rear axle) on right side plane
(8) Other (specify): _____
(9) Unknown

37. Type of Fuel Tank-1 9
38. Type of Fuel Tank-2 9
(0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

39. Location of Fuel Tank-1 9
40. Location of Fuel Tank-2 9
(0) No fuel tank
(1) Aft of center of the rear wheels (rear axle) centered
(2) Aft of center of the rear wheels (rear axle) left side
(3) Aft of center of the rear wheels (rear axle) right side
(4) Forward of center of the rear wheels (rear axle) centered
(5) Forward of center of the rear wheels (rear axle) left side
(6) Forward of center of the rear wheels (rear axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify): _____
(9) Unknown

41. Damage to Fuel Tank-1 9
42. Damage to Fuel Tank-2 9
(0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify): _____
(9) Unknown

43. Leakage Location of Fuel System-1 1

44. Leakage Location of Fuel System-2 1
(0) No fuel tank
(1) No fuel leakage

Primary Area Of Leakage
(2) Tank
(3) Filler neck
(4) Cap
(5) Lines/pump/filter
(6) Vent/emission recovery
(8) Other (specify):_____
(9) Unknown

45. Fuel Type-1 01

46. Fuel Type-2 01

Single Fuel Type
(00) No fuel tank
(01) Gasoline
(02) Diesel
(03) CNG (Compressed Natural Gas)
(04) LPG (Liquid Petroleum Gas) also known as Propane
(05) LNG (Liquid Natural Gas)
(06) Methanol (M100 or M85)
(07) Ethanol (E100 or E85)
(08) Other (Hydrogen or others) (specify):
_____

Electric Powered or Electric/Solar Powered Vehicles
(10) Lead Acid Battery
(11) Nickel-Iron Battery
(12) Nickel-Cadmium Battery
(13) Sodium Metal Chloride Battery
(14) Sodium Sulfur Battery
(18) Other (Specify):_____

(98) Other Hybrid (specify):
_____

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 1
(0) No (one or two tanks only)

Yes - More Than Two Tanks
(1) Yes -- no damage to any tank or filler cap and no fuel system leakage
(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location):
_____
(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):
Type of tank _____
Tank location _____
Filler cap location _____
Tank damage _____
Location of leakage _____
Type of fuel _____
(9) Unknown if more than two tanks

COMMENTS

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***

(GV10=0)

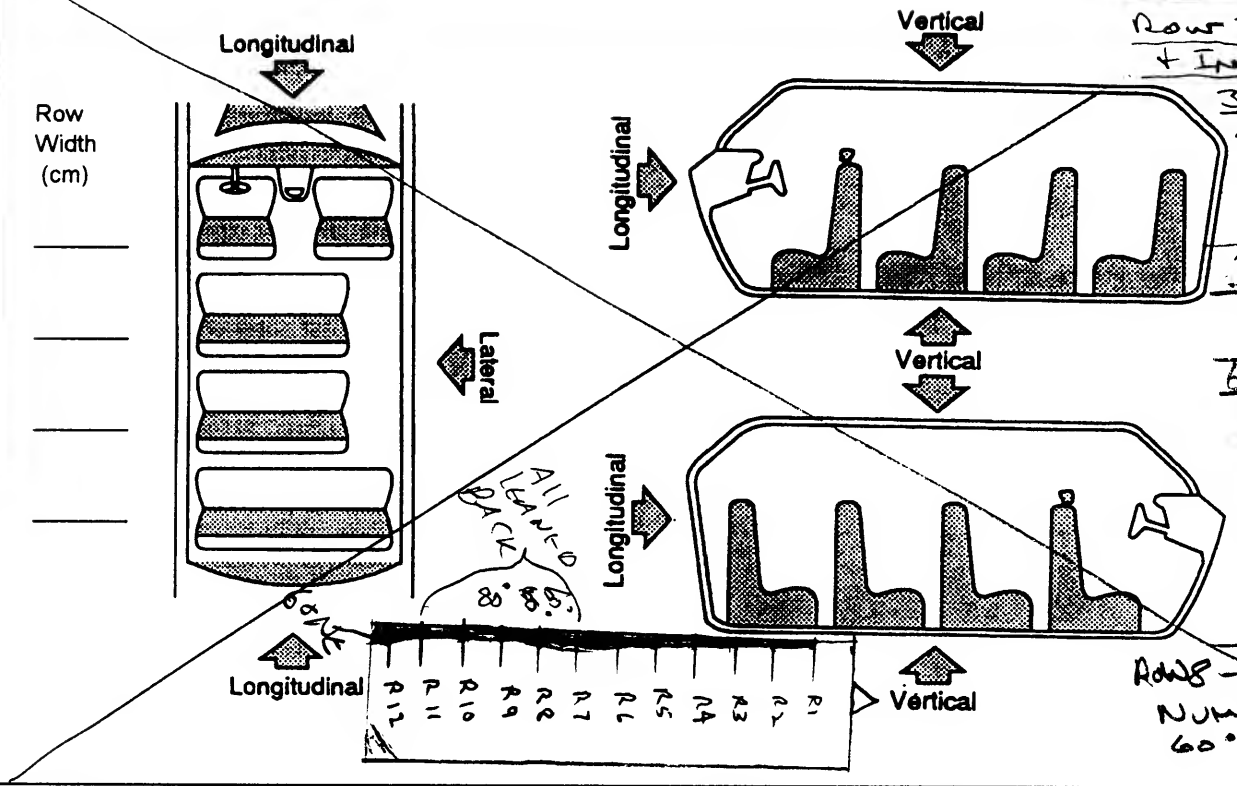
DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

SEATS OFF

INTRUSION WORKSHEET

BEST AVAILABLE

Note: Sketch intruded areas



LEFT SIDE

ROW 2 ROCK DAMAGE + IMBEDDED GLASS

3 ROCK IMPAC

4 GLASS + SEAT DEFO BY INTRU

5 ROCK DEFORMED INTRUSION

6 DEFORMED GLASS + ROCK

7 NUMEROUS ROC SEAT DEF BY INTRUS LEANING BAC 60°

ROWS - INTRUSION DEFO NUMEROUS ROCKS 60° LEANED BA OVER

(All Measurements Are In Centimeters)

LOCATION OF INTRUSION	INTRUDED COMPONENT	COMPARISON VALUE	—	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
(L) SIDE ROW 1 (L)	SIDE PANEL	Ø	—	4.4	=	4.4 CM	3 (LAT.)
ROW 2 (L)	SIDE PANEL		—	11.4	=	11.4 CM	3
ROW 3 (L)	SIDE PANEL		—	20.3	=	20.3 CM	3
ROW 4 (L)	SIDE PANEL		—	30.5	=	30.5 CM	3
ROW 5 (L)	SIDE PANEL		—	33.0	=	33.0 CM	3
ROW 6 (L)	SIDE PANEL		—	33.0	=	33.0 CM	3
ROW 7 (L)	SIDE PANEL		—	35.6	=	35.6 CM	3
ROW 8 (L)	SIDE PANEL		—	25.4	=	25.4 CM	3
ROW 9 (L)	SIDE PANEL		—	24.1	=	24.1 CM	3
ROW 10 (L)	SIDE PANEL		—	20.3	=	20.3 CM	3
ROW 11 (L)	SIDE PANEL		—	27.9	=	27.9 CM	3
ROW 12 (L)	SIDE PANEL	Ø	—	30.5	=	30.5 CM	3
			—		=		3
			—		=		
			—		=		

Document no more than the 15 most severe intrusions

CASE NUMBER DS9520

MISSING DATA

THE FOLLOWING DATA ARE NOT INCLUDED IN THIS CASE:

PAGE NUMBER(S)

7-11

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [ ] Yes [X]

Describe indications of ejection and body parts involved in partial ejection(s):

PART OF ROOF OF SCHOOL BUS WAS RIPPED AWAY AND ENTIRE BACK SECTION OF BUS SEPERATED FROM CHASSIS AT IMPACT W/ SCHL. BUS LEFT REAR SEAT - ROW 12 (LAST SEAT) WAS RIPPED COMPLETELY OUT OF BUS W/OCCUPANT

Occupant Number	27					
Ejection	1					
(Note on Vehicle Interior Sketch) Ejection Area	4					
Ejection Medium	5					
Medium Status	3					

Ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify): _____
(9) Unknown

Ejection Medium
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify): _____
(5) Integral structure
(8) Other medium (specify): _____
(9) Unknown

Medium Status (Immediately Prior to Impact)
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [ ] Yes [ ]

Describe entrapment mechanism: _____

Component(s): _____

(Note in vehicle interior diagram)

U.S. Department of Transportation
National Highway Traffic Safety Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number ___
2. Case Number - Stratum DSI-95-SB-0220
3. Vehicle Number 02

VEHICLE IDENTIFICATION

4. Vehicle Model Year 87
   Code the last two digits of the model year
   (99) Unknown

5. Vehicle Make (specify): 85
   KENWORTH
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (99) Unknown

6. Vehicle Model (specify): 881
   TRUCK 6X4
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (999) Unknown

7. Body Type 63
   Note: Applicable codes may be found on the back of this page.

8. Vehicle Identification Number
   2NKCLX0X9HM******
   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
   Left justify; Slash zeros and letter Z (Ø and Z)
   No VIN—Code all zeros
   Unknown—Code all nines

9. Vehicle Special Use (This Trip) 0
   (0) No special use
   (1) Taxi
   (2) Vehicle used as school bus
   (3) Vehicle used as other bus
   (4) Military
   (5) Police
   (6) Ambulance
   (7) Fire truck or car
   (8) Other (specify): _____
   (9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 1
    (0) Not towed due to vehicle damage
    (1) Towed due to vehicle damage
    (9) Unknown

11. Police Reported Travel Speed 050
    Code to the nearest kmph (NOTE: 000 means less than 0.5 kmph)
    (160) 159.5 kmph and above
    (999) Unknown
    31 mph X 1.6093 = 050 kmph

12. Speed Limit 064
    (000) No statutory limit
    Code posted or statutory speed limit in kmph
    (999) Unknown
    40 mph X 1.6093 = 064 kmph

13. Police Reported Alcohol Presence For Driver 0
    (0) No alcohol present
    (1) Yes alcohol present
    (7) Not reported
    (8) No driver present
    (9) Unknown

14. Alcohol Test Result For Driver 96
    Code actual value (decimal implied before first digit—0.xx)
    (95) Test refused
    (96) None given
    (97) AC test performed, results unknown
    (98) No driver present
    (99) Unknown
    Source: PAR

15. Police Reported Other Drug Presence For Driver 0
    (0) No other drug(s) present
    (1) Yes other drug(s) present
    (7) Not reported
    (8) No driver present
    (9) Unknown

16. Other Drug Specimen Test Result For Driver 0
    (0) No specimen test given
    (1) Drug(s) not found in specimen
    (2) Drug(s) found in specimen, (specify): _____
    (3) Specimen test given, results unknown or not obtained
    (8) No driver present
    (9) Unknown if specimen test given

17. Driver's Zip Code
    (00001) Driver not a resident of U.S. or territories
    _____ Code actual 5-digit zip code
    (99998) No driver present
    (99999) Unknown

18. Driver's Race/Ethnic Origin 1
    (1) White (non-Hispanic)
    (2) Black (non-Hispanic)
    (3) White (Hispanic)
    (4) Black (Hispanic)
    (5) American Indian, Eskimo or Aleut
    (6) Asian or Pacific Islander
    (7) Other (specify): _____
    (8) No driver present
    (9) Unknown

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

(01) Convertible (excludes sun-roof, t-bar)
(02) 2-door sedan, hardtop, coupe
(03) 3-door/2-door hatchback
(04) 4-door sedan, hardtop
(05) 5-door/4-door hatchback
(06) Station wagon (excluding van and truck based)
(07) Hatchback, number of doors unknown
(08) Other automobile type (specify):

_____

(09) Unknown automobile type

Automobile Derivatives

(10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
(11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
(12) Large limousine - more than four side doors or stretched chassis
(13) Three-wheel automobile or automobile derivative

Utility Vehicles (≤ 4,536 kgs GVWR)

(14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
(15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
(16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
(19) Utility, unknown body type

Van Based Light Trucks (≤ 4,536 kgs GVWR)

(20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
(21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
(22) Step van or walk-in van (≤ 4,536 kgs GVWR)
(23) Van based motorhome (≤ 4,536 kgs GVWR)
(24) Van based school bus (≤ 4,536 kgs GVWR)
(25) Van based other bus (≤ 4,536 kgs GVWR)
(28) Other van type (Hi-Cube Van, Kary) (specify):

_____

(29) Unknown van type

Light Conventional Trucks (Pickup style cab, ≤ 4,536 kgs GVWR)

(30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10 , T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
(31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
(32) Pickup with slide-in camper
(33) Convertible pickup
(39) Unknown pickup style light conventional truck type

Other Light Trucks (≤ 4,536 kgs GVWR)

(40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
(41) Truck based panel
(42) Light truck based motorhome (chassis mounted)
(45) Other light conventional truck type
(48) Unknown light truck type
(49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

(50) School bus (designed to carry students, not cross country or transit)
(58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):

_____

(59) Unknown bus type

Medium/Heavy Trucks (> 4,536 kgs GVWR)

(60) Step van (> 4,536 kgs GVWR)
(61) Single unit straight truck (4,536 kgs < GVWR ≤ 8,845 kgs)
(62) Single unit straight truck (8,845 kgs < GVWR ≤ 11,793 kgs)
(63) Single unit straight truck (> 11,793 kgs GVWR)
(64) Single unit straight truck, GVWR unknown
(65) Medium/heavy truck based motorhome
(67) Truck-tractor with no cargo trailer
(68) Truck-tractor pulling one trailer
(69) Truck-tractor pulling two or more trailers
(70) Truck-tractor (unknown if pulling trailer)
(78) Unknown medium/heavy truck type
(79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

(80) Motorcycle
(81) Moped (motorized bicycle)
(82) Three-wheel motorcycle or moped
(88) Other motored cycle (minibike, motorscooter) (specify):_____
(89) Unknown motored cycle type

Other Vehicles

(90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
(91) Snowmobile
(92) Farm equipment other than trucks
(93) Construction equipment other than trucks
(97) Other vehicle type
(99) Unknown body type

PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction — 2
    (0) Non-interchange area and non-junction
    (1) Interchange area related

    Non-Interchange junctions
    (2) Intersection related
    (3) Driveway, alley access related
    (4) Other junction (specify) _____
    (5) Unknown type of junction

    (9) Unknown

20. Trafficway Flow — Ø
    (0) Not physically divided (two way traffic)
    (1) Divided trafficway-median strip without positive barrier
    (2) Divided trafficway-median strip with positive barrier
    (3) One way traffic
    (9) Unknown

21. Number Of Travel Lanes — 2
    (1) One
    (2) Two
    (3) Three
    (4) Four
    (5) Five
    (6) Six
    (7) Seven or more
    (9) Unknown

22. Roadway Alignment — 1
    (1) Straight
    (2) Curve right
    (3) Curve left
    (9) Unknown

23. Roadway Profile — 1
    (1) Level
    (2) Uphill grade (>2%)
    (3) Hill crest
    (4) Downhill grade (>2%)
    (5) Sag
    (9) Unknown

24. Roadway Surface Type — 2
    (1) Concrete
    (2) Bituminous (asphalt)
    (3) Brick or block
    (4) Slag, gravel, or stone
    (5) Dirt
    (8) Other (specify): _____
    (9) Unknown

25. Roadway Surface Condition — 1
    (1) Dry
    (2) Wet
    (3) Snow or slush
    (4) Ice
    (5) Sand, dirt, or oil
    (8) Other (specify): _____
    (9) Unknown

26. Light Conditions — 1
    (1) Daylight
    (2) Dark
    (3) Dark, but lighted
    (4) Dawn
    (5) Dusk
    (9) Unknown

27. Atmospheric Conditions — Ø
    (0) No adverse atmospheric-related driving conditions
    (1) Rain
    (2) Sleet/hail
    (3) Snow
    (4) Fog
    (5) Rain and fog
    (6) Sleet and fog
    (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____
    (9) Unknown

28. Traffic Control Device — 2
    (0) No traffic control(s)
    (1) Traffic control signal (not RR crossing)

    Regulatory
    (2) Stop sign
    (3) Yield sign
    (4) School zone sign
    (5) Other regulatory sign (specify): _____
    (6) Warning sign (not RR crossing)
    (7) Unknown sign
    (8) Miscellaneous/other controls including RR controls (specify): _____
    (9) Unknown

29. Traffic Control Device Functioning — 2
    (0) No traffic control device
    (1) Traffic control device not functioning (specify): _____
    (2) Traffic control device functioning properly
    (9) Unknown

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 01

(00) No driver present
(01) Attentive or not distracted
(02) Looked but did not see

Distractions

(03) By other occupant(s), (specify): _____
(04) By moving object in vehicle (specify): _____
(05) While talking or listening to cellular phone (specify location and type of phone): _____
(06) While dialing cellular phone (specify location and type of phone): _____
(07) While adjusting climate controls
(08) While adjusting radio, cassette, CD (specify): _____
(09) While using other device/controls integral to vehicle (specify): _____
(10) While using or reaching for device/object brought into vehicle (specify): _____
(11) Sleepy or fell asleep
(12) Distracted by outside person, object, or event (specify): _____
(13) Eating or drinking
(14) Smoking related
(97) Distracted/inattentive, details unknown
(98) Other, distraction (specify): _____
(99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 01

(00) No driver present
(01) Going straight
(02) Decelerating in traffic lane
(03) Accelerating in traffic lane
(04) Starting in traffic lane
(05) Stopped in traffic lane
(06) Passing or overtaking another vehicle
(07) Disabled or parked in travel lane
(08) Leaving a parking position
(09) Entering a parking position
(10) Turning right
(11) Turning left
(12) Making a U-turn
(13) Backing up (other than for parking position)
(14) Negotiating a curve
(15) Changing lanes
(16) Merging
(17) Successful avoidance maneuver to a previous critical event
(97) Other (specify): _____
(99) Unknown

32. Critical Precrash Event 17

THIS VEHICLE LOSS OF CONTROL DUE TO:

(01) Blow out or flat tire
(02) Stalled engine
(03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
(04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
(05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
(06) Traveling too fast for conditions
(08) Other cause of control loss (specify): _____
(09) Unknown cause of control loss

THIS VEHICLE TRAVELLING

(10) Over the lane line on left side of travel lane
(11) Over the lane line on right side of travel lane
(12) Off the edge of the road on the left side
(13) Off the edge of the road on the right side
(14) End departure
(15) Turning left at intersection
(16) Turning right at intersection
(17) Crossing over (passing through) intersection
(18) This vehicle decelerating
(19) Unknown travel direction

OTHER MOTOR VEHICLE IN LANE

(50) Other vehicle stopped
(51) Traveling in same direction with lower steady speed
(52) Traveling in same direction while decelerating
(53) Traveling in same direction with higher speed
(54) Traveling in opposite direction
(55) In crossover
(56) Backing
(59) Unknown travel direction of other motor vehicle in lane

OTHER MOTOR VEHICLE ENCROACHING INTO LANE

(60) From adjacent lane (same direction)—over left lane line
(61) From adjacent lane (same direction)—over right lane line
(62) From opposite direction—over left lane line
(63) From opposite direction—over right lane line
(64) From parking lane
(65) From crossing street, turning into same direction
(66) From crossing street, across path
(67) From crossing street, turning into opposite direction
(68) From crossing street, intended path not known
(70) From driveway, turning into same direction
(71) From driveway, across path
(72) From driveway, turning into opposite direction
(73) From driveway, intended path not known
(74) From entrance to limited access highway
(78) Encroachment by other vehicle—details unknown

PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST

(80) Pedestrian in roadway
(81) Pedestrian approaching roadway
(82) Pedestrian—unknown location
(83) Pedalcyclist or other nonmotorist in roadway

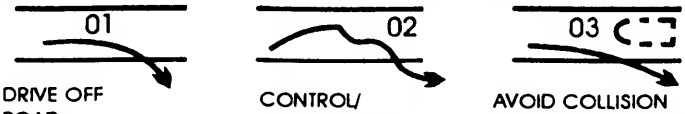
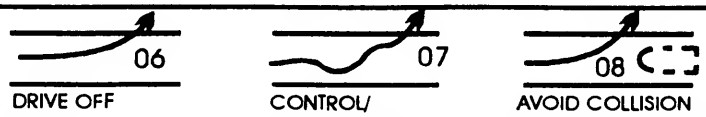
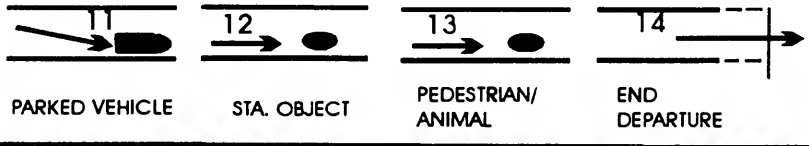
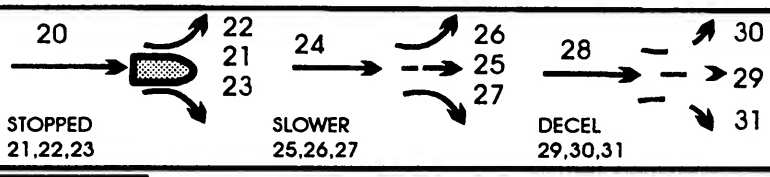
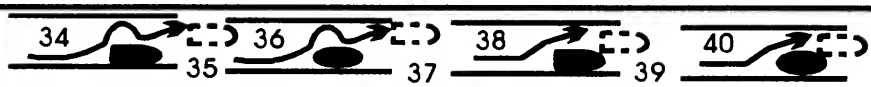
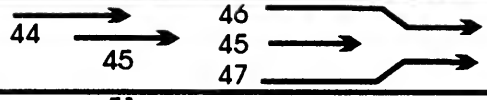
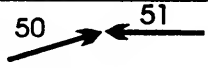
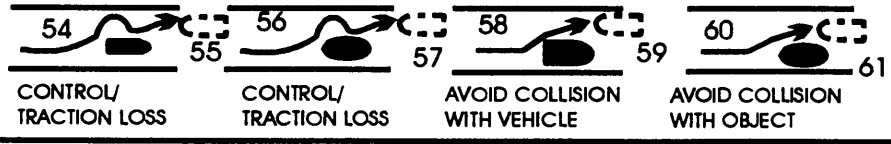
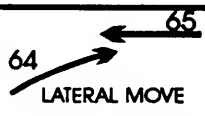
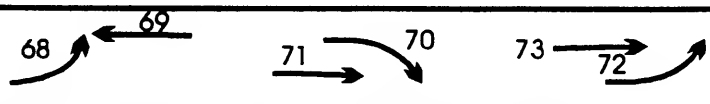
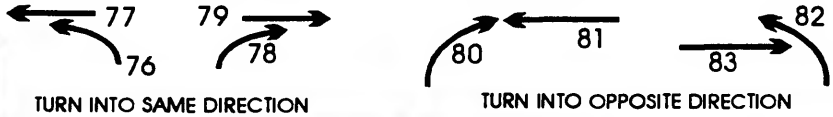
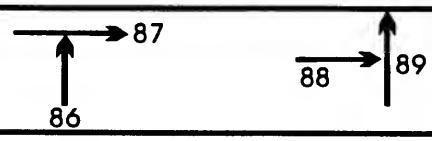
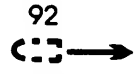
(specify): _____

(84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
(85) Pedalcyclist or other nonmotorist—unknown location

(specify): _____

OBJECT OR ANIMAL

(87) Animal in roadway
(88) Animal approaching roadway
(89) Animal—unknown location
(90) Object in roadway
(91) Object approaching roadway
(92) Object—unknown location
(98) Other critical precrash event (specify): _____
(99) Unknown

Category	Configuration	ACCIDENT TYPES (Includes Intent)
I Single driver	A. Right Roadside Departure	 04 SPECIFICS OTHER 05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	 09 SPECIFICS OTHER 10 SPECIFICS UNKNOWN
	C. Forward Impact	 15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D. Rear-End	 (EACH• 32) SPECIFICS OTHER (EACH• 33) SPECIFICS UNKNOWN
	E. Forward Impact	 (EACH• 42) SPECIFICS OTHER (EACH• 43) SPECIFICS UNKNOWN
	F. Sideswipe/ Angle	 (EACH• 48) SPECIFICS OTHER (EACH• 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G. Head-On	 (EACH• 52) SPECIFICS OTHER (EACH• 53) SPECIFICS UNKNOWN
	H. Forward Impact	 (EACH• 62) SPECIFICS OTHER (EACH• 63) SPECIFICS UNKNOWN
	I. Sideswipe/ Angle	 (EACH• 66) SPECIFICS OTHER (EACH• 67) SPECIFICS UNKNOWN
IV Change Trafficway Vehicle Turing	J. Turn Across Path	 (EACH• 74) SPECIFICS OTHER (EACH• 75) SPECIFICS UNKNOWN
	K. Turn Into Path	 (EACH• 84) SPECIFICS OTHER (EACH• 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L. Straight Paths	 (EACH• 90) SPECIFICS OTHER (EACH• 91) SPECIFICS UNKNOWN
VI. Miscel-laneous	M. Backing Etc.	 98 Other Accident Type 99 Unknown Accident Type 00 No Impact

33. Attempted Avoidance Maneuver 99
- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify): _____
- (99) Unknown

34. Pre-Impact Stability 1
- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (9) Precrash stability unknown

35. Pre-Impact Location 1
- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 88
(Note: Applicable codes on back of this page)
- (00) No impact
  Code the number of the diagram that best describes the accident circumstance
- (98) Other accident type (specify): _____
- (99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

OCCUPANT RELATED

37. Driver Presence in Vehicle ____
(0) Driver not present
(1) Driver present
(9) Unknown

38. Number of Occupants This Vehicle ____ ____
(00-96) Code actual number of occupants for this vehicle
(97) 97 or more
(99) Unknown

39. Number of Occupant Forms Submitted ____ ____

AIR BAG RELATED

40. Is this an AOPS Vehicle? ____
(0) No (includes unknown)
(1) Yes - researcher determined
(2) VIN determined air bag system
(3) VIN determined automatic (passive) belts
(4) VIN determined air bag and automatic (passive) belts

41. Air Bag(s) Deployment, First Seat Frontal ____
(0) Not equipped or not available
(1) No air bags deployed

Single Air Bag Vehicle
(2) Driver air bag deployed
(3) Driver air bag, unknown if deployed

Multiple Air Bag Vehicle
(4) Driver side only deployed
(5) Passenger side only deployed
(6) Driver and passenger side deployed
(7) Driver and passenger side unknown if deployed
(8) Air bag(s) deployed, details unknown
(9) Unknown

42. Air Bag(s) Deployment, Other Than First Seat Frontal ____
(0) Not equipped with an "other" air bag
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, details unknown
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Specify type of "other" air bag present: _____

_____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight ___,___ ___ 0
____ Code weight to nearest 10 kilograms.
(045) Less than 454 kilograms
(612) 6,124 kilograms or more
(999) Unknown
___ ___,___ ___ ___ lbs X .4536 = ___,___ ___ ___ kgs

Source: _____

44. Vehicle Cargo Weight ___,___ ___ 0
____ Code weight to nearest 10 kilograms.
(000) Less than 5 kilograms
(454) 4,536 kilograms or more
(999) Unknown
___ ___,___ ___ ___ lbs X .4536 = ___,___ ___ ___ kgs

Source: _____

ROLLOVER DATA

45. Rollover ____ ____
(00) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)
(01-16) Code the number of quarter turns
(17) Rollover, 17 or more quarter turns
(specify): _____
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)
(99) Rollover (overturn), details unknown

46. Rollover Initiation Type ____ ____
(00) No rollover
(01) Trip-over
(02) Flip-over
(03) Turn-over
(04) Climb-over
(05) Fall-over
(06) Bounce-over
(07) Collision with another vehicle
(08) Other rollover initiation type specify):
_____
(98) Rollover--end-over-end
(99) Unknown rollover initiation type

47. Location of Rollover Initiation ____
(0) No rollover
(1) On roadway
(2) On shoulder—paved
(3) On shoulder—unpaved
(4) On roadside or divided trafficway median
(8) Rollover--end-over-end
(9) Unknown

48. Rollover Initiation Object Contacted ____ ____
(Note: Applicable codes on back of page)

49. Location on Vehicle Where Initial Principal Tripping Force Is Applied ____
(0) No rollover
(1) Wheels/tires
(2) Side plane
(3) End plane
(4) Undercarriage
(5) Other location on vehicle (specify):
_____
(6) Non-contact rollover forces (specify):
_____
(8) Rollover--end-over-end
(9) Unknown

50. Direction of Initial Roll ____
(0) No rollover
(1) Roll right - primarily about the longitudinal axis
(2) Roll left - primarily about the longitudinal axis
(8) Rollover--end-over-end
(9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover
(01-30) — Vehicle Number

Noncollision
(31) Turn-over — fall-over
(32) No rollover impact initiation (end-over-end)
(34) Jackknife

Collision With Fixed Object
(41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
(50) Pole or post (≤ 10 cm in diameter)
(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
(52) Pole or post (> 30 cm in diameter)
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail) (specify):_____

(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify):

_____

(69) Unknown fixed object

Collision with Nonfixed Object
(70) Passenger car, light truck, van, or other vehicle not in-transport
(71) Medium/heavy truck or bus not in-transport
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(79) Object fell from vehicle in-transport
(88) Other nonfixed object (specify):

_____

(89) Unknown nonfixed object

(98) Other event (specify):

_____

(99) Unknown event or object

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) ___

52. Rear Override/Underride (this Vehicle) ___

(0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

Override (see specific CDC)
(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))
(1) 1st CDC
(2) 2nd CDC
(3) Other not automated CDC (specify):

_____

Underride (see specific CDC)
(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))
(4) 1st CDC
(5) 2nd CDC
(6) Other not automated CDC (specify):

_____

(7) Medium/heavy truck or bus override (of any configuration)
(9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
(996) Non-horizontal impact
(997) Noncollision
(998) Impact with object
(999) Unknown

53. Heading Angle For This Vehicle ___ ___ ___

54. Heading Angle For Other Vehicle ___ ___ ___

RECONSTRUCTION DATA

55. Towed Trailing Unit ___
(0) No towed unit
(1) Yes—towed trailing unit
(9) Unknown

56. Documentation of Trajectory Data for This Vehicle ___
(0) No
(1) Yes

57. Post Collision Condition of Tree or Pole (For Highest Delta V) ___
(0) Not collision (for highest delta V) with tree or pole
(1) Not damaged
(2) Cracked/sheared
(3) Tilted < 45 degrees
(4) Tilted ≥45 degrees
(5) Uprooted tree
(6) Separated pole from base
(7) Pole replaced
(8) Other (specify):

_____

(9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) ___ ___

(00) No vehicle inspection

Delta V Calculated
(01) Reconstruction program-damage only routine
(02) Reconstruction program-damage and trajectory routine
(03) Missing vehicle algorithm

Delta V Not Calculated
(04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstuction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

(05) Rollover
(06) Other non-horizontal forces
(07) Sideswipe type damage
(08) Severe override
(09) Yielding object
(10) Overlapping damage
(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):

_____

_____

(98) Other, (specify): _____

_____

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V — Highest ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

60. Longitudinal Component of Delta V — Highest + - ___ ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: __000 means greater than −0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(__999) Unknown

61. Lateral Component of Delta V — Highest + - ___ ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: __000 means greater than −0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(__999) Unknown

62. Energy Absorption — Highest ___ ___ ___, ___ 0 0

_____ Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

63. Impact Speed — Highest ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(998) Trajectory algorithm not run
(999) Unknown

DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V) ___
(0) No reconstruction
(1) Collision fits model — results appear reasonable
(2) Collision fits model — results appear high
(3) Collision fits model — results appear low
(4) Borderline reconstruction — results appear reasonable

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed — Highest ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

ESTIMATED DELTA V

66. Estimated Highest Delta V (Researcher Determined) ____
    (0) Reconstruction Delta V coded

    Estimated Delta V
    (1) Less than 10 kmph
    (2) ≥ 10 kmph but < 25 kmph
    (3) ≥ 25 kmph but < 40 kmph
    (4) ≥ 40 kmph but < 55 kmph
    (5) ≥ 55 kmph

    Other estimates of damage severity
    (6) Minor
    (7) Moderate
    (8) Severe

    (9) Unknown

INSPECTION TYPE

67. Type of Vehicle Inspection ____
    (0) No inspection
    (1) Vehicle fully repaired-no damage evident
    (2) Partial inspection (specify):
    _____
    (3) Complete inspection

DELTA V EVENT NUMBER

68. Delta V Event Number ____
    _____ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle
    (99) Unknown

***** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), *****

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

***** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE *****

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,

OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

U.S. Department of Transportation
National Highway Traffic Safety Administration

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number ____
2. Case Number - Stratum DSI-95-SB-0070
3. Vehicle Number 02

VEHICLE IDENTIFICATION

VIN 2NKCL2ØX9HM****** Model Year 87

Vehicle Make (specify): KENWORTH Vehicle Model (specify): TRUCK 6X4

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
Ø1	(F) FRONT BUMPER		(F) FRONT BUMPER

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage Width (CDC)	Direct Damage Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D
Ø1	FRONT BUMPER		51.Ø								
		"LEFT FRONT AXLE WAS DISPLACED 30.0 cm REARWARD"									

ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	___ ___ ___.___	inches	x	2.54	=	___ ___ ___ cm
Overall Length	___ ___ ___.___	inches	x	2.54	=	___ ___ ___ cm
Maximum Width	___ ___ ___.___	inches	x	2.54	=	___ ___ ___ cm
Curb Weight	___ ___,___ ___ ___	pounds	x	.4536	=	___,___ ___ ___ kg
Average Track	___ ___ ___.___	inches	x	2.54	=	___ ___ ___ cm
Front Overhang	___ ___ ___.___	inches	x	2.54	=	___ ___ ___ cm
Rear Overhang	___ ___ ___.___	inches	x	2.54	=	___ ___ ___ cm
Undeformed End Width	___ ___ ___.___	inches	x	2.54	=	___ ___ ___ cm
Engine Size: cyl./displ.	___ ___ ___ ___	cc	x	.001	=	___.___ L
	___ ___ ___	CID	x	.0164	=	___.___ L

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE

	a. Rotation physically restricted	b. Tire deflated
RF	2	2
LF	2	1
RR	2	2
LR	2	2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☒ Manual ☐ Automatic

END SHIFT ≥ 10 CM
☐ Yes ☐ No

ORIGINAL SPECIFICATIONS

Wheelbase		cm
Overall Length		cm
Maximum Width		cm
Curb Weight		kg
Average Track	226	cm
Front Overhang		cm
Rear Overhang		cm
Undeformed End Width		cm
Engine Size: cyl./displ.		L

WHEEL STEER ANGLES

(For locked front wheels or displaced rear axles only)

RF ± ___ ___ °
LF ± ___ ___ °
RR ± ___ ___ °
LR ± ___ ___ °

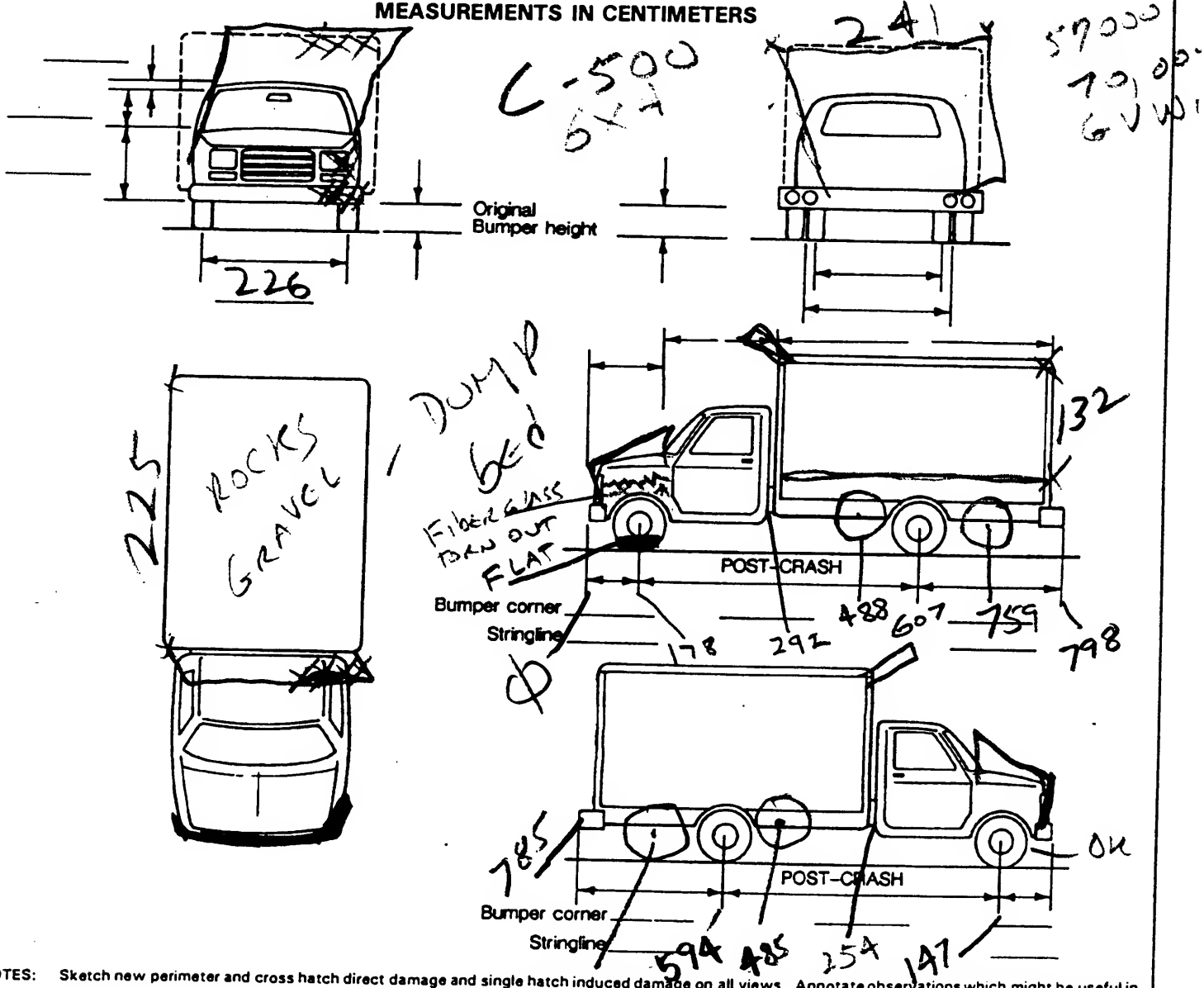
Within ± 5 degrees

DRIVE WHEELS

☐ FWD ☐ RWD ☐ 4WD

Approximate Cargo Weight ___ kg

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
- (31) Overturn — rollover (excludes end-over-end)
- (32) Rollover—end-over-end
- (33) Fire or explosion
- (34) Jackknife
- (35) Other intraunit damage (specify): _____
- (36) Noncollision injury
- (38) Other noncollision (specify): _____
- (39) Noncollision — details unknown

Collision With Fixed Object
- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify): _____
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____
- (69) Unknown fixed object

Collision with Nonfixed Object
- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance _____
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____
- (89) Unknown nonfixed object
- (98) Other event (specify): _____
- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4.___ ___	5.___ ___	6.___ ___	7.___	8.___	9.___	10.___	11.___ ___

Second Highest Delta "V"

12.___ ___	13.___ ___	14.___ ___	15.___	16.___	17.___	18.___	19.___ ___

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L	21. C_1	C_2	C_3	C_4	C_5	C_6	22. ±D
___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	+ − ___ ___ ___ ___

Second Highest Delta "V"

23. L	24. C_1	C_2	C_3	C_4	C_5	C_6	25. ±D
___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	___ ___ ___	+ − ___ ___ ___ ___

26. Undeformed End Width (Coded when highest severity impact is an end plane impact.) ___ ___ ___
- ____ Code to the nearest centimeter
- (250) 250 centimeters or more
- (998) No highest severity end plane impact
- (999) Unknown

27. Direct Damage Width (For highest severity impact) ___ ___ ___
- ____ Code to the nearest centimeter
- (250) 250 centimeters or more
- (999) Unknown

28. Original Wheelbase ___ ___ ___
- ____ Code to the nearest centimeter
- (650) 650 centimeters or more
- (999) Unknown

___ ___ ___ . ___ inches X 2.54 = ___ ___ ___ centimeters

29. Original Average Track Width ___ ___ ___
- ____ Code to the nearest centimeter
- (185) 185 centimeters or more
- (999) Unknown

___ ___ ___ . ___ inches X 2.54 = ___ ___ ___ centimeters

30. Are CDCs Documented but Not Coded on The Automated File? Ø
(0) No
(1) Yes

31. Researcher's Assessment of Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 1
(0) No post manufacturer modifications
(1) Yes - post manufacturer modifications
(specify): Truck - Dump
(Include photograph of CERTIFICATION PLACARD in case report)
(9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence Ø
(0) No fire

Yes, fire occurred
(1) Minor
(2) Major
(9) Unknown

34. Origin of Fire Ø
(0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify):
(9) Unknown

FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap 9

36. Location of Fuel Tank-2 Filler Cap 9
(0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle) on left side plane
(3) Aft of center of the rear wheels (rear axle) on right side plane
(4) Forward of center of the rear wheels (rear axle) on left side plane
(5) Forward of center of the rear wheels (rear axle) on right side plane
(6) Over the center of the rear wheels (rear axle) on left side plane
(7) Over the center of the rear wheels (rear axle) on right side plane
(8) Other (specify):
(9) Unknown

37. Type of Fuel Tank-1 9

38. Type of Fuel Tank-2 9
(0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

39. Location of Fuel Tank-1 9

40. Location of Fuel Tank-2 9
(0) No fuel tank
(1) Aft of center of the rear wheels (rear axle) centered
(2) Aft of center of the rear wheels (rear axle) left side
(3) Aft of center of the rear wheels (rear axle) right side
(4) Forward of center of the rear wheels (rear axle) centered
(5) Forward of center of the rear wheels (rear axle) left side
(6) Forward of center of the rear wheels (rear axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify):
(9) Unknown

41. Damage to Fuel Tank-1 9

42. Damage to Fuel Tank-2 9
(0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify):
(9) Unknown

43. Leakage Location of Fuel System-1 9

44. Leakage Location of Fuel System-2 9
(0) No fuel tank
(1) No fuel leakage

Primary Area Of Leakage
(2) Tank
(3) Filler neck
(4) Cap
(5) Lines/pump/filter
(6) Vent/emission recovery
(8) Other (specify):_____
(9) Unknown

45. Fuel Type-1 99

46. Fuel Type-2 99

Single Fuel Type
(00) No fuel tank
(01) Gasoline
(02) Diesel
(03) CNG (Compressed Natural Gas)
(04) LPG (Liquid Petroleum Gas) also known as Propane
(05) LNG (Liquid Natural Gas)
(06) Methanol (M100 or M85)
(07) Ethanol (E100 or E85)
(08) Other (Hydrogen or others) (specify):
_____

Electric Powered or Electric/Solar Powered Vehicles
(10) Lead Acid Battery
(11) Nickel-Iron Battery
(12) Nickel-Cadmium Battery
(13) Sodium Metal Chloride Battery
(14) Sodium Sulfur Battery
(18) Other (Specify):_____

(98) Other Hybrid (specify):
_____

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 9
(0) No (one or two tanks only)

Yes - More Than Two Tanks
(1) Yes -- no damage to any tank or filler cap and no fuel system leakage
(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location):
_____
(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):
Type of tank _____
Tank location _____
Filler cap location _____
Tank damage _____
Location of leakage _____
Type of fuel _____
(9) Unknown if more than two tanks

COMMENTS

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

***** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED *****

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

U.S. Department of Transportation
National Highway Traffic Safety Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number ___
2. Case Number - Stratum DS1-95-5B-020
3. Vehicle Number 03

VEHICLE IDENTIFICATION

4. Vehicle Model Year 94
   Code the last two digits of the model year
   (99) Unknown

5. Vehicle Make (specify): 12
   FORD
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (99) Unknown

6. Vehicle Model (specify): 881
   F-60
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (999) Unknown

7. Body Type 67
   Note: Applicable codes may be found on the back of this page.

8. Vehicle Identification Number
   1FDNF60HSEV******
   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
   Left justify; Slash zeros and letter Z (0 and Z)
   No VIN—Code all zeros
   Unknown—Code all nines

9. Vehicle Special Use (This Trip) 0
   (0) No special use
   (1) Taxi
   (2) Vehicle used as school bus
   (3) Vehicle used as other bus
   (4) Military
   (5) Police
   (6) Ambulance
   (7) Fire truck or car
   (8) Other (specify): ___
   (9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 0
    (0) Not towed due to vehicle damage
    (1) Towed due to vehicle damage
    (9) Unknown

11. Police Reported Travel Speed 048
    Code to the nearest kmph (NOTE: 000 means less than 0.5 kmph)
    (160) 159.5 kmph and above
    (999) Unknown
    30 mph X 1.6093 = 048 kmph

12. Speed Limit 080
    (000) No statutory limit
    Code posted or statutory speed limit in kmph
    (999) Unknown
    50 mph X 1.6093 = 080 kmph

13. Police Reported Alcohol Presence For Driver 0
    (0) No alcohol present
    (1) Yes alcohol present
    (7) Not reported
    (8) No driver present
    (9) Unknown

14. Alcohol Test Result For Driver 9.6
    Code actual value (decimal implied before first digit—0.xx)
    (95) Test refused
    (96) None given
    (97) AC test performed, results unknown
    (98) No driver present
    (99) Unknown
    Source: PAR

15. Police Reported Other Drug Presence For Driver 0
    (0) No other drug(s) present
    (1) Yes other drug(s) present
    (7) Not reported
    (8) No driver present
    (9) Unknown

16. Other Drug Specimen Test Result For Driver 0
    (0) No specimen test given
    (1) Drug(s) not found in specimen
    (2) Drug(s) found in specimen, (specify): ___
    (3) Specimen test given, results unknown or not obtained
    (8) No driver present
    (9) Unknown if specimen test given

17. Driver's Zip Code
    (00001) Driver not a resident of U.S. or territories
    ___ Code actual 5-digit zip code
    (99998) No driver present
    (99999) Unknown

18. Driver's Race/Ethnic Origin 3
    (1) White (non-Hispanic)
    (2) Black (non-Hispanic)
    (3) White (Hispanic)
    (4) Black (Hispanic)
    (5) American Indian, Eskimo or Aleut
    (6) Asian or Pacific Islander
    (7) Other (specify): ___
    (8) No driver present
    (9) Unknown

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

(01) Convertible (excludes sun-roof, t-bar)
(02) 2-door sedan, hardtop, coupe
(03) 3-door/2-door hatchback
(04) 4-door sedan, hardtop
(05) 5-door/4-door hatchback
(06) Station wagon (excluding van and truck based)
(07) Hatchback, number of doors unknown
(08) Other automobile type (specify):

_____

(09) Unknown automobile type

Automobile Derivatives

(10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
(11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
(12) Large limousine - more than four side doors or stretched chassis
(13) Three-wheel automobile or automobile derivative

Utility Vehicles (≤ 4,536 kgs GVWR)

(14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
(15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
(16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
(19) Utility, unknown body type

Van Based Light Trucks (≤ 4,536 kgs GVWR)

(20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
(21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
(22) Step van or walk-in van (≤ 4,536 kgs GVWR)
(23) Van based motorhome (≤ 4,536 kgs GVWR)
(24) Van based school bus (≤ 4,536 kgs GVWR)
(25) Van based other bus (≤ 4,536 kgs GVWR)
(28) Other van type (Hi-Cube Van, Kary) (specify):

_____

(29) Unknown van type

Light Conventional Trucks (Pickup style cab, ≤ 4,536 kgs GVWR)

(30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10 , T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
(31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
(32) Pickup with slide-in camper
(33) Convertible pickup
(39) Unknown pickup style light conventional truck type

Other Light Trucks (≤ 4,536 kgs GVWR)

(40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
(41) Truck based panel
(42) Light truck based motorhome (chassis mounted)
(45) Other light conventional truck type
(48) Unknown light truck type
(49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

(50) School bus (designed to carry students, not cross country or transit)
(58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):

_____

(59) Unknown bus type

Medium/Heavy Trucks (> 4,536 kgs GVWR)

(60) Step van (> 4,536 kgs GVWR)
(61) Single unit straight truck (4,536 kgs < GVWR ≤ 8,845 kgs)
(62) Single unit straight truck (8,845 kgs < GVWR ≤ 11,793 kgs)
(63) Single unit straight truck (> 11,793 kgs GVWR)
(64) Single unit straight truck, GVWR unknown
(65) Medium/heavy truck based motorhome
(67) Truck-tractor with no cargo trailer
(68) Truck-tractor pulling one trailer
(69) Truck-tractor pulling two or more trailers
(70) Truck-tractor (unknown if pulling trailer)
(78) Unknown medium/heavy truck type
(79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

(80) Motorcycle
(81) Moped (motorized bicycle)
(82) Three-wheel motorcycle or moped
(88) Other motored cycle (minibike, motorscooter) (specify):_____
(89) Unknown motored cycle type

Other Vehicles

(90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
(91) Snowmobile
(92) Farm equipment other than trucks
(93) Construction equipment other than trucks
(97) Other vehicle type
(99) Unknown body type

PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction — 2
    (0) Non-interchange area and non-junction
    (1) Interchange area related

    Non-Interchange junctions
    (2) Intersection related
    (3) Driveway, alley access related
    (4) Other junction (specify) _____
    (5) Unknown type of junction

    (9) Unknown

20. Trafficway Flow — 0
    (0) Not physically divided (two way traffic)
    (1) Divided trafficway-median strip without positive barrier
    (2) Divided trafficway-median strip with positive barrier
    (3) One way traffic
    (9) Unknown

21. Number Of Travel Lanes — 2
    (1) One
    (2) Two
    (3) Three
    (4) Four
    (5) Five
    (6) Six
    (7) Seven or more
    (9) Unknown

22. Roadway Alignment — 1
    (1) Straight
    (2) Curve right
    (3) Curve left
    (9) Unknown

23. Roadway Profile — 1
    (1) Level
    (2) Uphill grade (>2%)
    (3) Hill crest
    (4) Downhill grade (>2%)
    (5) Sag
    (9) Unknown

24. Roadway Surface Type — 2
    (1) Concrete
    (2) Bituminous (asphalt)
    (3) Brick or block
    (4) Slag, gravel, or stone
    (5) Dirt
    (8) Other (specify): _____
    (9) Unknown

25. Roadway Surface Condition — 1
    (1) Dry
    (2) Wet
    (3) Snow or slush
    (4) Ice
    (5) Sand, dirt, or oil
    (8) Other (specify): _____
    (9) Unknown

26. Light Conditions — 1
    (1) Daylight
    (2) Dark
    (3) Dark, but lighted
    (4) Dawn
    (5) Dusk
    (9) Unknown

27. Atmospheric Conditions — 0
    (0) No adverse atmospheric-related driving conditions
    (1) Rain
    (2) Sleet/hail
    (3) Snow
    (4) Fog
    (5) Rain and fog
    (6) Sleet and fog
    (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____
    (9) Unknown

28. Traffic Control Device — 0
    (0) No traffic control(s)
    (1) Traffic control signal (not RR crossing)

    Regulatory
    (2) Stop sign
    (3) Yield sign
    (4) School zone sign
    (5) Other regulatory sign (specify): _____
    (6) Warning sign (not RR crossing)
    (7) Unknown sign
    (8) Miscellaneous/other controls including RR controls (specify): _____
    (9) Unknown

29. Traffic Control Device Functioning — 0
    (0) No traffic control device
    (1) Traffic control device not functioning (specify): _____
    (2) Traffic control device functioning properly
    (9) Unknown

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) Ø1
(00) No driver present
(01) Attentive or not distracted
(02) Looked but did not see

Distractions
(03) By other occupant(s), (specify): _____
(04) By moving object in vehicle (specify): _____
(05) While talking or listening to cellular phone (specify location and type of phone): _____
(06) While dialing cellular phone (specify location and type of phone): _____
(07) While adjusting climate controls
(08) While adjusting radio, cassette, CD (specify): _____
(09) While using other device/controls integral to vehicle (specify): _____
(10) While using or reaching for device/object brought into vehicle (specify): _____
(11) Sleepy or fell asleep
(12) Distracted by outside person, object, or event (specify): _____
(13) Eating or drinking
(14) Smoking related
(97) Distracted/inattentive, details unknown
(98) Other, distraction (specify): _____
(99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) Ø1
(00) No driver present
(01) Going straight
(02) Decelerating in traffic lane
(03) Accelerating in traffic lane
(04) Starting in traffic lane
(05) Stopped in traffic lane
(06) Passing or overtaking another vehicle
(07) Disabled or parked in travel lane
(08) Leaving a parking position
(09) Entering a parking position
(10) Turning right
(11) Turning left
(12) Making a U-turn
(13) Backing up (other than for parking position)
(14) Negotiating a curve
(15) Changing lanes
(16) Merging
(17) Successful avoidance maneuver to a previous critical event
(97) Other (specify): _____
(99) Unknown

32. Critical Precrash Event 17

THIS VEHICLE LOSS OF CONTROL DUE TO:
(01) Blow out or flat tire
(02) Stalled engine
(03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
(04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
(05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
(06) Traveling too fast for conditions
(08) Other cause of control loss (specify): _____
(09) Unknown cause of control loss

THIS VEHICLE TRAVELLING
(10) Over the lane line on left side of travel lane
(11) Over the lane line on right side of travel lane
(12) Off the edge of the road on the left side
(13) Off the edge of the road on the right side
(14) End departure
(15) Turning left at intersection
(16) Turning right at intersection
(17) Crossing over (passing through) intersection
(18) This vehicle decelerating
(19) Unknown travel direction

OTHER MOTOR VEHICLE IN LANE
(50) Other vehicle stopped
(51) Traveling in same direction with lower steady speed
(52) Traveling in same direction while decelerating
(53) Traveling in same direction with higher speed
(54) Traveling in opposite direction
(55) In crossover
(56) Backing
(59) Unknown travel direction of other motor vehicle in lane

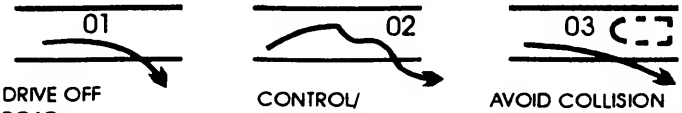
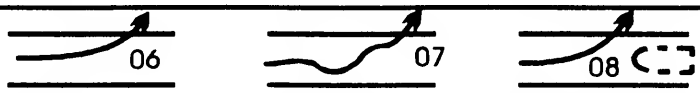
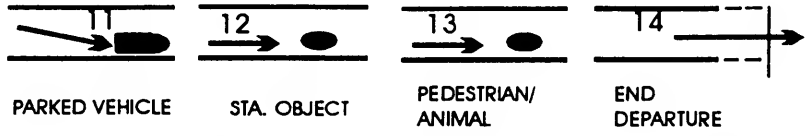
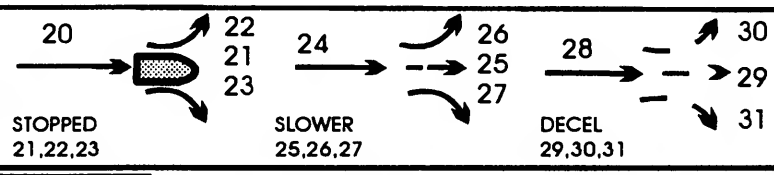
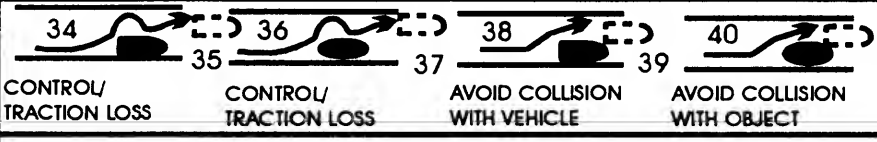
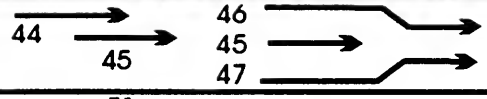
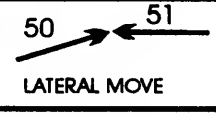
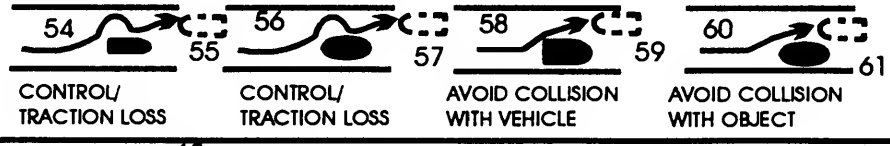
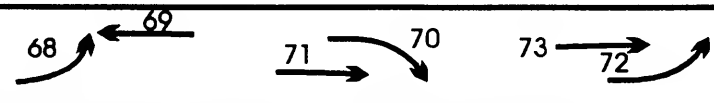
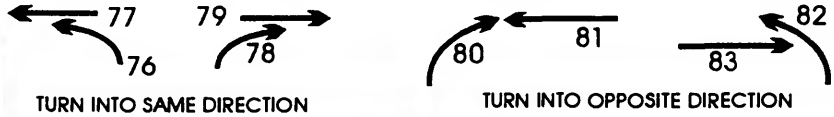
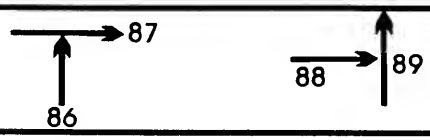
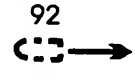
OTHER MOTOR VEHICLE ENCROACHING INTO LANE
(60) From adjacent lane (same direction)—over left lane line
(61) From adjacent lane (same direction)—over right lane line
(62) From opposite direction—over left lane line
(63) From opposite direction—over right lane line
(64) From parking lane
(65) From crossing street, turning into same direction
(66) From crossing street, across path
(67) From crossing street, turning into opposite direction
(68) From crossing street, intended path not known
(70) From driveway, turning into same direction
(71) From driveway, across path
(72) From driveway, turning into opposite direction
(73) From driveway, intended path not known
(74) From entrance to limited access highway
(78) Encroachment by other vehicle—details unknown

PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST
(80) Pedestrian in roadway
(81) Pedestrian approaching roadway
(82) Pedestrian—unknown location
(83) Pedalcyclist or other nonmotorist in roadway

(specify): _____
(84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
(85) Pedalcyclist or other nonmotorist—unknown location

(specify): _____

OBJECT OR ANIMAL
(87) Animal in roadway
(88) Animal approaching roadway
(89) Animal—unknown location
(90) Object in roadway
(91) Object approaching roadway
(92) Object—unknown location
(98) Other critical precrash event (specify): _____
(99) Unknown

Category	Configuration	ACCIDENT TYPES (Includes Intent)
I Single driver	A. Right Roadside Departure	 04 SPECIFICS OTHER 05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	 09 SPECIFICS OTHER 10 SPECIFICS UNKNOWN
	C. Forward Impact	 15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D. Rear-End	 (EACH• 32) SPECIFICS OTHER (EACH• 33) SPECIFICS UNKNOWN
	E. Forward Impact	 (EACH• 42) SPECIFICS OTHER (EACH• 43) SPECIFICS UNKNOWN
	F. Sideswipe/ Angle	 (EACH• 48) SPECIFICS OTHER (EACH• 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G. Head-On	 (EACH• 52) SPECIFICS OTHER (EACH• 53) SPECIFICS UNKNOWN
	H. Forward Impact	 (EACH• 62) SPECIFICS OTHER (EACH• 63) SPECIFICS UNKNOWN
	I. Sideswipe/ Angle	 (EACH• 66) SPECIFICS OTHER (EACH• 67) SPECIFICS UNKNOWN
IV Change Trafficway Vehicle Turing	J. Turn Across Path	 (EACH• 74) SPECIFICS OTHER (EACH• 75) SPECIFICS UNKNOWN
	K. Turn Into Path	 (EACH• 84) SPECIFICS OTHER (EACH• 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L. Straight Paths	 (EACH• 90) SPECIFICS OTHER (EACH• 91) SPECIFICS UNKNOWN
VI. Miscel-laneous	M. Backing Etc.	 98 Other Accident Type 99 Unknown Accident Type 00 No impact

33. Attempted Avoidance Maneuver — 01
(00) No driver present
(01) No avoidance maneuver
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(98) Other action (specify): _____
(99) Unknown

34. Pre-Impact Stability — 1
(0) No driver present
(1) Tracking
(2) Skidding longitudinally—rotation less than 30 degrees
(3) Skidding laterally—clockwise rotation
(4) Skidding laterally—counterclockwise rotation
(7) Other vehicle loss-of-control (specify): _____
(9) Precrash stability unknown

35. Pre-Impact Location — 1
(0) No driver present
(1) Stayed in original travel lane
(2) Stayed on roadway but left original travel lane
(3) Stayed on roadway, not known if left original travel lane
(4) Departed roadway
(5) Remained off roadway
(6) Returned to roadway
(7) Entered roadway
(9) Unknown

36. Accident Type — 98
(Note: Applicable codes on back of this page)
(00) No impact
Code the number of the diagram that best describes the accident circumstance
(98) Other accident type (specify): _____
(99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

OCCUPANT RELATED

37. Driver Presence in Vehicle ___
(0) Driver not present
(1) Driver present
(9) Unknown

38. Number of Occupants This Vehicle ___ ___
(00-96) Code actual number of occupants for this vehicle
(97) 97 or more
(99) Unknown

39. Number of Occupant Forms Submitted ___ ___

AIR BAG RELATED

40. Is this an AOPS Vehicle? ___
(0) No (includes unknown)
(1) Yes - researcher determined
(2) VIN determined air bag system
(3) VIN determined automatic (passive) belts
(4) VIN determined air bag and automatic (passive) belts

41. Air Bag(s) Deployment, First Seat Frontal ___
(0) Not equipped or not available
(1) No air bags deployed

Single Air Bag Vehicle
(2) Driver air bag deployed
(3) Driver air bag, unknown if deployed

Multiple Air Bag Vehicle
(4) Driver side only deployed
(5) Passenger side only deployed
(6) Driver and passenger side deployed
(7) Driver and passenger side unknown if deployed
(8) Air bag(s) deployed, details unknown
(9) Unknown

42. Air Bag(s) Deployment, Other Than First Seat Frontal ___
(0) Not equipped with an "other" air bag
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, details unknown
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Specify type of "other" air bag present: _____

_____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight ___,___ ___ 0
_____ Code weight to nearest 10 kilograms.
(045) Less than 454 kilograms
(612) 6,124 kilograms or more
(999) Unknown
___ ___,___ ___ ___ lbs X .4536 = ___,___ ___ ___ kgs

Source: _____

44. Vehicle Cargo Weight ___,___ ___ 0
_____ Code weight to nearest 10 kilograms.
(000) Less than 5 kilograms
(454) 4,536 kilograms or more
(999) Unknown
___ ___,___ ___ ___ lbs X .4536 = ___,___ ___ ___ kgs

Source: _____

ROLLOVER DATA

45. Rollover ___ ___
(00) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)
(01-16) Code the number of quarter turns
(17) Rollover, 17 or more quarter turns (specify): _____
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)
(99) Rollover (overturn), details unknown

46. Rollover Initiation Type ___ ___
(00) No rollover
(01) Trip-over
(02) Flip-over
(03) Turn-over
(04) Climb-over
(05) Fall-over
(06) Bounce-over
(07) Collision with another vehicle
(08) Other rollover initiation type specify):

_____
(98) Rollover--end-over-end
(99) Unknown rollover initiation type

47. Location of Rollover Initiation ___
(0) No rollover
(1) On roadway
(2) On shoulder—paved
(3) On shoulder—unpaved
(4) On roadside or divided trafficway median
(8) Rollover--end-over-end
(9) Unknown

48. Rollover Initiation Object Contacted ___ ___
(Note: Applicable codes on back of page)

49. Location on Vehicle Where Initial Principal Tripping Force Is Applied ___
(0) No rollover
(1) Wheels/tires
(2) Side plane
(3) End plane
(4) Undercarriage
(5) Other location on vehicle (specify):

_____
(6) Non-contact rollover forces (specify):

_____
(8) Rollover--end-over-end
(9) Unknown

50. Direction of Initial Roll ___
(0) No rollover
(1) Roll right - primarily about the longitudinal axis
(2) Roll left - primarily about the longitudinal axis
(8) Rollover--end-over-end
(9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover
(01-30) — Vehicle Number

Noncollision
(31) Turn-over — fall-over
(32) No rollover impact initiation (end-over-end)
(34) Jackknife

Collision With Fixed Object
(41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
(50) Pole or post (≤ 10 cm in diameter)
(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
(52) Pole or post (> 30 cm in diameter)
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail) (specify):_____

(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify):

_____
(69) Unknown fixed object

Collision with Nonfixed Object
(70) Passenger car, light truck, van, or other vehicle not in-transport
(71) Medium/heavy truck or bus not in-transport
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(79) Object fell from vehicle in-transport
(88) Other nonfixed object (specify):

_____
(89) Unknown nonfixed object

(98) Other event (specify):

_____
(99) Unknown event or object

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) ___

52. Rear Override/Underride (this Vehicle) ___

(0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

Override (see specific CDC)
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
(1) 1st CDC
(2) 2nd CDC
(3) Other not automated CDC (specify):

_____

Underride (see specific CDC)
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
(4) 1st CDC
(5) 2nd CDC
(6) Other not automated CDC (specify):

_____

(7) Medium/heavy truck or bus override (of any configuration)
(9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
(996) Non-horizontal impact
(997) Noncollision
(998) Impact with object
(999) Unknown

53. Heading Angle For This Vehicle ___ ___ ___

54. Heading Angle For Other Vehicle ___ ___ ___

RECONSTRUCTION DATA

55. Towed Trailing Unit ___
(0) No towed unit
(1) Yes—towed trailing unit
(9) Unknown

56. Documentation of Trajectory Data for This Vehicle ___
(0) No
(1) Yes

57. Post Collision Condition of Tree or Pole (For Highest Delta V) ___
(0) Not collision (for highest delta V) with tree or pole
(1) Not damaged
(2) Cracked/sheared
(3) Tilted < 45 degrees
(4) Tilted ≥ 45 degrees
(5) Uprooted tree
(6) Separated pole from base
(7) Pole replaced
(8) Other (specify):

_____

(9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) ___ ___

(00) No vehicle inspection

Delta V Calculated
(01) Reconstruction program-damage only routine
(02) Reconstruction program-damage and trajectory routine
(03) Missing vehicle algorithm

Delta V Not Calculated
(04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstuction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

(05) Rollover
(06) Other non-horizontal forces
(07) Sideswipe type damage
(08) Severe override
(09) Yielding object
(10) Overlapping damage
(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):

_____

_____

(98) Other, (specify): _____

_____

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V — Highest ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

60. Longitudinal Component of Delta V — Highest + − ___ ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: __000 means greater than −0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(__999) Unknown

61. Lateral Component of Delta V — Highest + − ___ ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: __000 means greater than −0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(__999) Unknown

62. Energy Absorption — Highest ___ ___ ___, ___ 0 0

_____ Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

63. Impact Speed — Highest ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(998) Trajectory algorithm not run
(999) Unknown

DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V) ___
(0) No reconstruction
(1) Collision fits model — results appear reasonable
(2) Collision fits model — results appear high
(3) Collision fits model — results appear low
(4) Borderline reconstruction — results appear reasonable

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed — Highest ___ ___ ___

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

ESTIMATED DELTA V

66. Estimated Highest Delta V (Researcher Determined) ____
    (0) Reconstruction Delta V coded

    Estimated Delta V
    (1) Less than 10 kmph
    (2) ≥ 10 kmph but < 25 kmph
    (3) ≥ 25 kmph but < 40 kmph
    (4) ≥ 40 kmph but < 55 kmph
    (5) ≥ 55 kmph

    Other estimates of damage severity
    (6) Minor
    (7) Moderate
    (8) Severe

    (9) Unknown

INSPECTION TYPE

67. Type of Vehicle Inspection ____
    (0) No inspection
    (1) Vehicle fully repaired-no damage evident
    (2) Partial inspection (specify):
    _____
    (3) Complete inspection

DELTA V EVENT NUMBER

68. Delta V Event Number ____
    _____ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle
    (99) Unknown

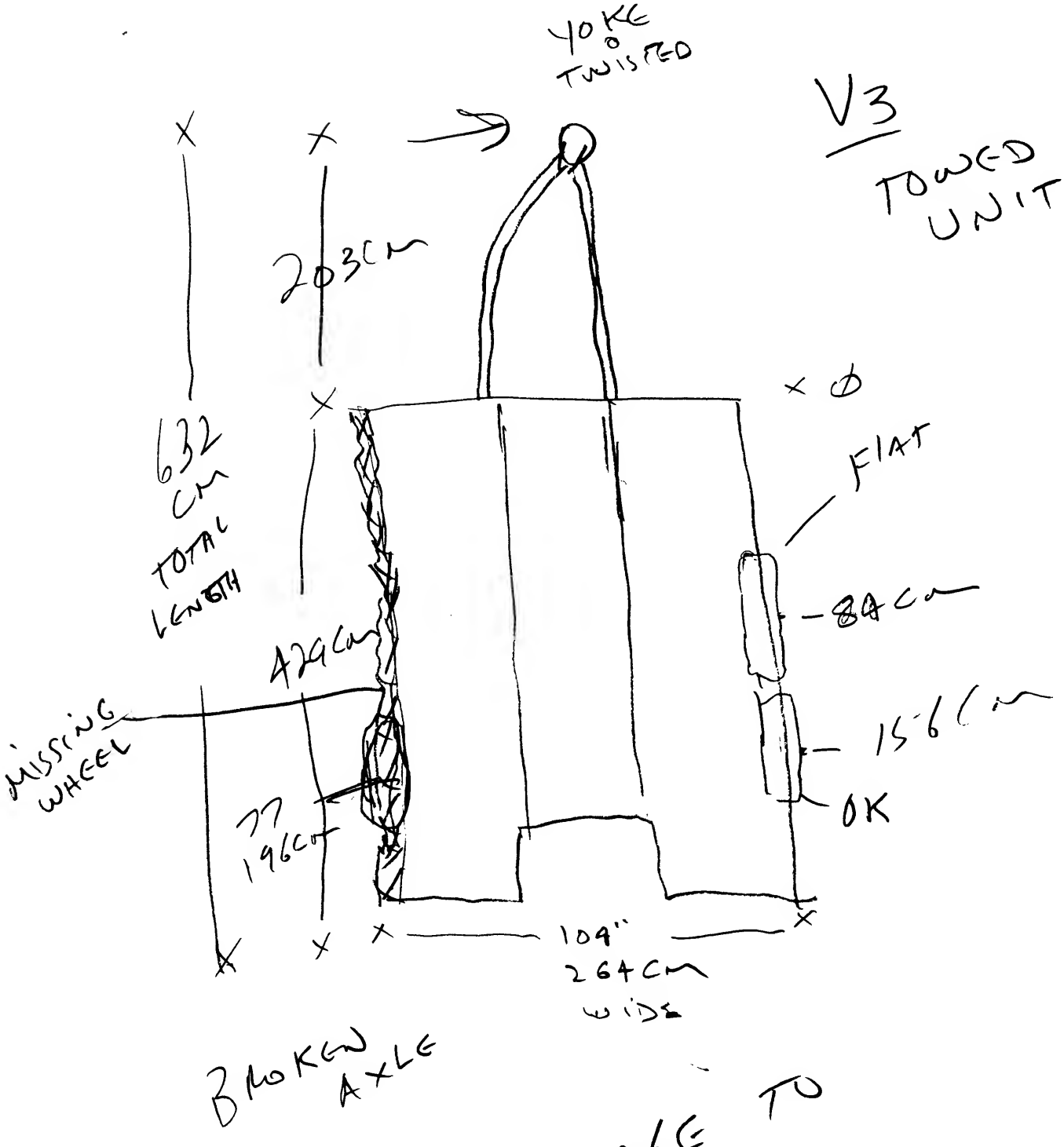
***** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), *****

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

***** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE *****

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,

OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.


YOKE TWISTED
V3
TOWED UNIT
203cm
632 cm TOTAL LENGTH
429cm
FLAT
84cm
15.6cm
OK
MISSING WHEEL
77 196cm
104" 264cm WIDE
BROKEN AXLE
DAMAGE TO LEFT SIDE